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SEA LANE DEFENSE:
JAPANESE CAPABILITIES AND IMPERATIVES

by

Daniel I. Gallagher

December 1987

Thesis Advisor: Prof. Claude A. Buss
Co-advisor: Prof. Edward A. Olsen

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SEA LANE DEFENSE:
JAPANESE CAPABILITIES AND IMPERATIVES

by

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Submitted in partial fulfillment of the
requirements for the degree of

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ABSTRACT

Japan has significant capabilities to protect its sealanes out to 1000 nautical miles to the south of its main ports. By concentrating military expenditures on forces to improve air defense, strait control, and convoy operations, Japan could have a credible defense, even in the worst possibility: global war and a Soviet attack.

The Japanese should concentrate on improving the air defense of Japan and the ocean between Iwo Jima and Okinawa, increasing their stockpile of mines and their mine warfare forces, and increasing the numbers of their long-range maritime patrol aircraft and surface escort ships. These improvements all maintain the defensive nature of Japanese forces and are attainable within the next decade.

TABLE OF CONTENTS

I. INTRODUCTION	7
A. IMPORTANCE OF SEA LANES TO JAPAN	7
B. IMPORTANCE OF SEA LANES IN JAPAN'S DEFENSE	11
C. HYPOTHESIS AND AIM	13
II. ROLE OF THE SEA LANES IN WAR	14
A. NUCLEAR WAR	15
B. CONVENTIONAL WAR	17
III. JAPANESE DEFENSE POLICY: RECOGNITION OF THE SEA LANES	21
A. CREATING A CONSENSUS	21
B. CONFLICTING PERCEPTIONS OF THE IMPORTANCE OF SEA LANES IN JAPAN'S DEFENSE	37
IV. THE JAPANESE SEARCH FOR STRATEGY IN SEA LANE DEFENSE	71
A. THE GOVERNMENT POSITION ON SEA LANES	71
B. JAPANESE CAPABILITIES FOR SEA LANE DEFENSE	77
C. JAPANESE FRIENDS AND ALLIES	84
D. JAPANESE MILITARY STRATEGY	89
V. SEA LANE DEFENSE: CHALLENGES AND IMPERATIVES	94
A. PREVIOUS STUDIES	94
B. THE SOVIET THREAT TO JAPANESE SEA LANES	113
C. CHALLENGES AND IMPERATIVES	131
VI. CONCLUSION	145
BIBLIOGRAPHY	148
INITIAL DISTRIBUTION LIST	158

LIST OF TABLES

TABLE I: JAPANESE OIL IMPORTS	8
TABLE II: NATIONAL DEFENSE PROGRAM OUTLINE	30
TABLE III: JAPAN'S NAVAL CAPABILITY	82
TABLE IV: SOVIET PACIFIC FLEET	119
TABLE V: FORCE ESTIMATES FOR JAPAN'S SEA LANE DEFENSE	143

LIST OF FIGURES

Figure 1: Japan's Sea Lanes	12
Figure 2: The Straits into the Sea of Japan	35
Figure 3: Sekino's Maritime Safety Zone	104

I. INTRODUCTION

A. IMPORTANCE OF SEA LANES TO JAPAN

Japan is the only major power whose weakness is its lack of resources and vulnerability to interruptions of its trade. Sea lane defense is critical to its survival in time of war: No country exports and imports a larger volume of materials by sea than Japan.¹ In 1984, over 85 percent of Japan's \$147 billion worth of exports, went by sea, as well as almost 90 percent of its \$112.7 billion imports. The majority of this trade is with North America, Asia and the Middle East.²

Nothing shows the importance of sea lanes to Japan more graphically than an analysis of its attempts to reduce its dependence oil imports. Japan imports all of its oil, most of it from the Middle East. (Table I lists Japanese oil imports and their source.)

Ever since the 1973-74 oil crisis, Japan has been trying to reduce its dependence on imported oil by diversifying and gaining influence over its sources, developing alternative energy sources, stockpiling, and conserving. These efforts have produced significant, but limited results.

¹. Several countries have a higher percentage of their GNP which is exported, England and Germany for example.

². Unyusho Unyuseisakukyoku Johokanribu, ed., Nihon Kaiun no Genkyo (The Current Situation of Japanese Shipping) Tokyo: Nihon Kaiji Kohokyokai, 1984, p. 10, as quoted in Tsuneo Akaha, "Japan's Response to Threats of Shipping Disruptions in Southeast Asia and the Middle East" Pacific Affairs, Vol. 59, No. 2, Summer 1986, p. 256. Nihon Kaiun no Genkyo also states that in 1983, Japan exported 83,170,000 tons. 46.2 percent was bound for Asia, 20.8 percent for the Middle East, 14.1 percent for North America, 9.7 percent for Europe, 4.0 percent for Oceania, and 2.9 percent for Latin America. Japan imported 547,360,000 tons: 26.4 percent from the Middle East, 23.1 percent from Asia, 19.3 percent from Oceania, 16.5 percent from North America, 8.8 percent from Latin America, 3.6 percent from Africa, and 2.3 percent from Europe.

TABLE I: JAPANESE OIL IMPORTS (in percent)

	1981	1982	1983	1984	1985
Middle East	69.3	70.4	71.2	71.0	68.8
Southeast Asia	19.9	18.8	18.2	17.2	18.1*
N/S America	3.6	4.6	4.2	4.5	5.1
Africa	2.4	1.3	0.8	0.8	1.3
China/USSR	4.7	4.9	5.4	6.3	6.5

*Includes 1.3 percent from Australia for 1985.

Source: Petroleum Association of Japan. Figures for 1980-84 are from Akaha, Tsuneo, "Japan's Response to Threats of Shipping Disruptions in Southeast Asia and the Middle East" Pacific Affairs, Vol. 59, No. 2, Summer 1986, p. 257. Figures for 1985 are from Keizai Koho Center, Japan 1987: An International Comparison.

Japanese government assisted exploration projects to diversify oil sources have been launched throughout the world, and by 1982 about 9 percent of Japanese imports came from Japanese companies. In spite of this, Japan still depends on sea lanes from the Middle East for three quarters of its oil.

Japan's efforts to cut its consumption of oil was assisted when slowing economic growth lowered demand and changes in the economy's industrial structure saved an additional estimated 2-3 percent. Conservation cut another estimated 2-6 percent. But by far the most important factor was the development of alternative sources, particularly coal. Through these measures the percentage of the nation's energy supplied by oil decreased from 71.1 percent in 1979 to 59.6 percent in 1984.³ The Japanese government intends to continue this trend, targeting oil's share of the nation's energy at 53 percent in 1990 and 42 percent by 2000.

³. The Asian Wall Street Journal Weekly, October 22, 1985, p. 24 states that oil's share of energy consumed dropped steadily from 71.1 percent in 1979, to 65.8 percent in 1980, 63.7 percent in 1981, 61.6 percent in 1982, 60.9 percent in 1983, and 59.6 percent in 1984.

Coal, nuclear power, natural gas, geothermal power and hydroelectric power will supply the rest.

Unfortunately, Japan imports most of its coal and natural gas and, as of 1984, was still 83 percent dependent on imports for its total energy requirements.⁴ Despite all of these efforts, Japan is still critically dependent on the sea lanes for its energy.

The sea lanes are important not only for oil, but for other natural resources and food as well. Japan is dependent on outside sources for most of its natural resources importing 99.7 percent of its iron ore, 96.5 percent of its copper, 78.1 percent of its lead, 55.6 percent of its zinc, 98.3 percent of its tin, all of its nickel and aluminum, and 64.3 percent of its wood and lumber.⁵ Japan must also import food, even though its agriculture is the most efficient and productive in Asia. Only 15 percent of the land in Japan is arable, but five million people work on it to produce an amazing 72 percent of Japan's food.⁶ Japan is self-sufficient in rice, but only produces 34 percent of its total consumption in cereals, 73 percent in fruit, and 80 percent in meat.⁷

The most important Japanese sea lanes pass through the Southeast Asian straits--the Straits of Malacca and Singapore and the Lombok and Makassar Straits. Of the

4. Keizai Koho Center, Japan 1987: An International Comparison, 1987, p. 59.

5. Keizai Koho Center, p. 67.

6. McIntosh, Malcolm, Japan Re-armed, New York: St. Martin's Press, 1986, p. 39. De Blij, Harm J., and Muller, Peter O., Geography: Regions and Concepts, 4th ed., New York: John Wiley & Sons, 1985 states, that Japan raises approximately two thirds of its food. Figures from the Ministry of Agriculture, Forestry and Fisheries, Japan, as quoted by Keizai Koho Center, p. 17, list 63,988 metric tons of food imports of a total 134,187 metric tons domestic consumption, or approximately 48 percent of food requirements are imported.

7. Keizai Koho Center, p. 17.

140 to 150 ships passing through the Straits of Malacca and Singapore each day, 44 percent of the ships over 30,000 tons are Japanese. Japanese tankers carry 74 percent of the oil transported through the region's straits, supplying 85 percent of Japan's oil, 80 percent of its liquified petroleum gas, and 18 percent of its coal.

Southeast Asia is also an important region of trade to Japan. From the six members of the Association of Southeast Asian Nations (ASEAN)--Indonesia, Singapore, Malaysia, the Philippines, Thailand, and Brunei--Japan imports almost \$20 billion, or about 15 percent of its total imports, and exports nearly \$15 billion, accounting for over 10 percent of the country's world wide exports.⁸ Japan is the largest exporter to Indonesia, Thailand, Malaysia, and Singapore and the largest importer from Indonesia and Thailand.

To carry its imports and exports on the sea lanes the Japanese operate more merchant ships than any other nation, numbering 10,011 vessels as of July 1, 1986. It is the third largest merchant marine in the world in displacement, measuring 60 million deadweight tons.⁹

Most of the Japan-bound shipping approaches from the south terminating in Japanese ports on the southern or Pacific side of Honshu (the largest island). The sole exception is Kitakyushu, which is on the northern side of Kyushu and handles the trade from China and Korea. The Yokohama port handles the largest volume of shipping, freight which is bound for the Tokyo-Yokohama metroplex. Following in volume are Kobe, the port for the Kobe-Osaka-Kyoto industrial triangle on the eastern end of the Seto-Naikai (Japan's Inland Sea), and a

⁸. Akaha, p. 264.

⁹. Keizai Koho Center, p. 27.

smaller port at Nagoya. (See Figure 1 for a map of Japan's major sea lanes.)

A major conflict in the western Pacific would disrupt these sea lanes. Closure of the Straits of Malacca and Singapore or the Straits of Lombok and Makassar would force "shipping from the Persian Gulf to Japan [to] be rerouted around Australia, [increasing] the shipping distance by as much as 78 percent."¹⁰ In addition, warfare in the Pacific would cut the sea lanes from Japan to the United States.

B. IMPORTANCE OF SEA LANES IN JAPAN'S DEFENSE

Thus Japan's very livelihood--obtaining oil, food, and resources for its industry--shows how important the sea lanes are to the survival and welfare of the Japanese nation. Japan as a food-deficient resource-starved island nation is aware of its dependence on the sea. Therefore she must give major attention to the problems of defending those sea lanes.

In determining whether Japan is adequately prepared to defend its sea lanes, the following questions must be addressed: Do the Japanese have a realistic view of the importance of the sea lanes in the event of war? How do the Japanese perceive the role of their sea lanes in their defense policy? In the search for a strategy, what capabilities for sea lane defense do the Japanese have now? What are the challenges and imperatives which must be addressed in the formation of an adequate defense policy? How should the Japanese defend their sea lanes? And finally, the question of whether sea lane defense is the optimal Japanese contribution to the U.S.-Japanese alliance will be addressed.

¹⁰. Leifer, Michael, "The Security of Sea-lanes in Southeast Asia," Survival, Vol. 25, No. 1, January-February 1983, p. 16.

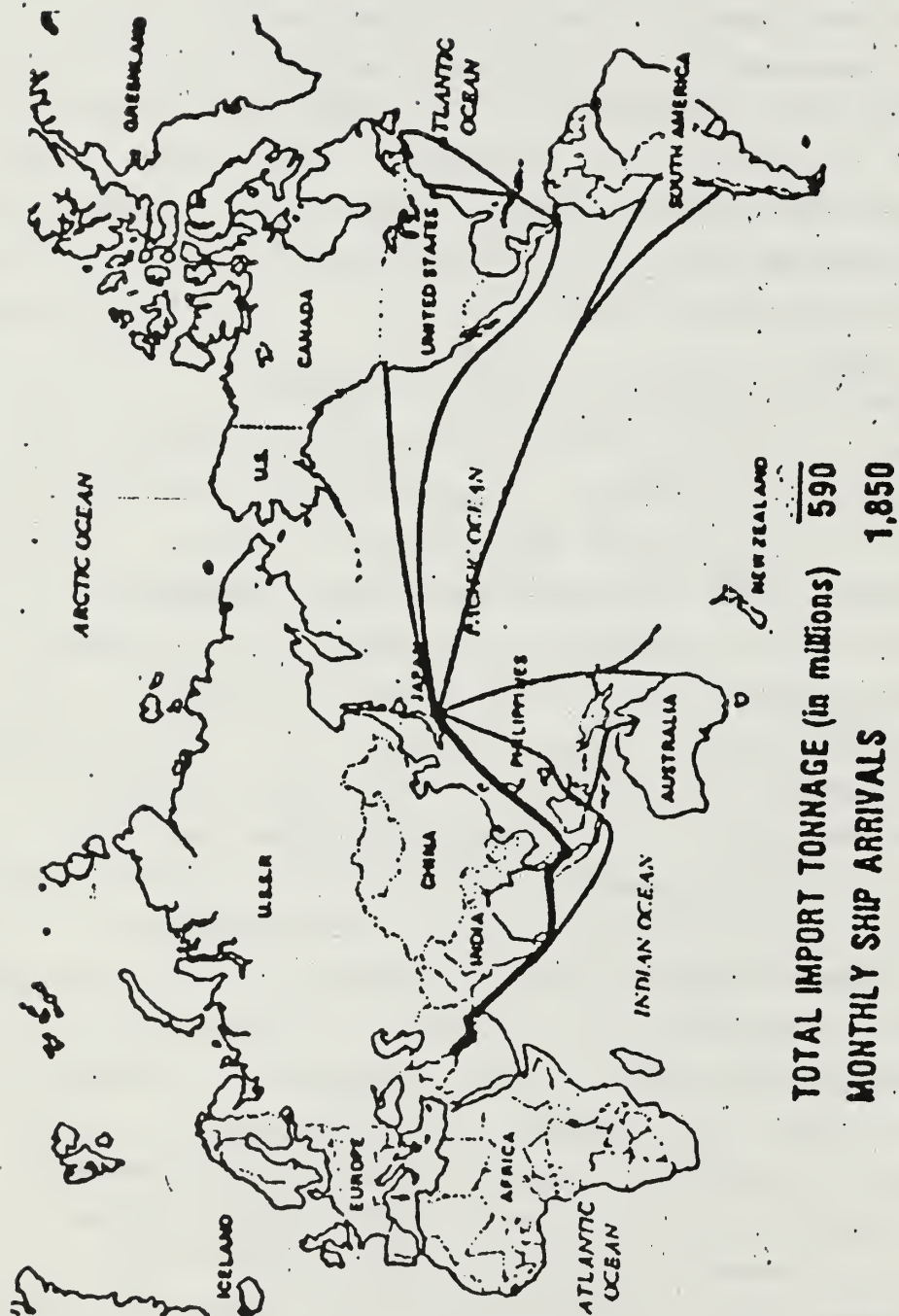


Figure 1: Japan's Sea Lanes

C. HYPOTHESIS AND AIM

The hypothesis of this thesis is that if Japan were to make marginal increases in its capabilities to conduct air defense, strait control, and convoy operations, Japan could defend its sea lanes against a threat from the Soviet Union, releasing U.S. forces to carry out offensive missions in accordance with the American Maritime Strategy. It is apparent that Japan does not have the capacity to singlehandedly defend its sea lanes with its own forces as presently organized. This thesis first analyzes the conflict in Japanese perceptions of defense policy, the role of sea lanes in current Japanese policy, and the factors involved in the formation of current Japanese strategy. Alternative strategies to defend Japanese sea lanes will be examined.

Changes could be made in Japanese strategy that would more effectively protect its sea lanes. Japan already has a limited capability to protect the sea lanes to the south of its main ports out to 1000 nautical miles. By concentrating military expenditures on forces that make full use of the defensive advantages of an island nation, Japan could have a credible defense, even if there was a global war and a Soviet attack on Japan.

The Japanese should concentrate on improving air defense over Japan and the ocean between Iwo Jima and Okinawa, enlarging their stockpile of mines and their mine warfare forces, increasing the number of their long range maritime patrol aircraft and the number of their surface escort ships. These improvements would maintain the defensive nature of Japanese forces and are easily attainable within the next decade.

II. ROLE OF THE SEA LANES IN WAR

The role of the sea lanes in war will depend on what kind of war involves Japan. In the event of a full scale nuclear attack, the impact of the sea lanes will be minor compared to the immense immediate destruction. However nuclear attack appears to be both the least likely conflict that would engulf Japan and the conflict that Japan is the least able to deter or defend against due to its public attitudes, population density, and neighbors afraid of a resurgent Japan. While the threat of nuclear attack can not be ignored, a complete treatment is beyond the scope of this work, which will briefly mention several factors that deter a nuclear attack on Japan.

In a conventional war, Japan could be invaded or blockaded by the Soviet Union, either in a global war against the United States or in a regional conflict in which the Soviet Union would be trying to gain a territorial or strategic advantage, ie., the demilitarization of Hokkaido or restrictions on the American use of Japanese bases. A blockade seems more probable. In either case, protecting the sea lanes would be essential for Japan's national survival.

The Japanese view the greatest threat to peace to be the confrontation between the U.S. and the Soviet Union. The Soviet Union is trying to expand its influence around the world, deterred only by the defense efforts of the U.S. and its allies. Tensions also exist between China and the Soviet Union, and North and South Korea. Other conflicts in the Middle East, Southeast Asia, Central America and Africa make the international situation "harsh, complicated and

fluid."¹¹ These conflicts are especially important for their possible economic effects. But it is the Soviet Union's "powerful military forces" which are increasing the "latent threat" to Japan.¹²

A. NUCLEAR WAR

The mere presence of nuclear weapons demands that they be considered when analyzing defense strategy. Even if nuclear weapons are not used they affect strategy.¹³ However, this thesis does not consider the aspects of nuclear war, as a preliminary analysis indicates that it is the least likely danger confronting Japan. Official statements indicate that the Japanese are relying on the U.S. to deter a nuclear attack on Japan.

Nuclear weapons would probably not be used against Japan due to the dangers of escalation. The United States is formally committed to defending Japan and would be forced to retaliate against a nuclear attack. Escalation is hard to control and this creates strong pressure on both sides not to use nuclear weapons. Both superpowers realize that their nations would be devastated in a major nuclear exchange and seek to avoid one. Limited nuclear attacks are also unlikely, because the outcome of a limited exchange is uncertain. The loss of one army, military base, or naval battle group is not likely to be decisive but would provoke a retaliatory strike of equal or greater strength. The other power would almost certainly be forced to retaliate, since failure to do so might be construed as

¹¹. Defense of Japan 1986, The Japan Times Ltd, 1986, pp. 4-5.

¹². Defense of Japan 1986, p. 24.

¹³. See Tritten, James John, CDR, USN, "(Non) Nuclear Warfare," USNI Proceedings, Vol. 113, No. 2, February 1987 for a discussion of nuclear weapons in conventional war.

weakness or a lack of resolve. The retaliation could cost more than the original strike gained. Finally, limited, or small-scale, nuclear weapon use is problematic. A "small" nuclear weapon must be on target. This is particularly troublesome if the target is mobile, such as an army, a battle group or a convoy. Near misses may not be devastating. If a nuclear weapon fails to achieve a "mission kill" on its target, then the escalation was not worth the risk. This uncertainty is bound to make decision-makers hesitate.

History suggests that the principle of deterrence may work. Opponents can independently conclude that the disadvantages of using a particular weapon outweigh its advantages. This reasoning prohibited the use of chemical warfare in World War II. Also, wars have been fought for limited objectives and with limited means. Antagonists in the European wars from 1814 to 1914 deliberately limited war objectives to preserve the opposing states and maintain the balance of power. Vietnam, Korea, and Afghanistan are other examples of limited wars.

A limited nuclear attack on Japan's ports would be the most devastating. The argument against such a clearly decisive, and destructive, act is that it would demand retaliation from the U.S.

Nuclear attacks on convoys is another possibility, but large merchant vessels may prove more resilient and harder to destroy than supposed. Ships are resistant to the blast and heat of a nuclear detonation. They can also be sealed with watertight doors, to minimize the effect of fallout. They can take evasive action, scatter upon attack, and move away from the site of the blast. Nuclear weapons would be more effective against naval vessels, which tend to be smaller, and rely on electronics, which are vulnerable to nuclear blast and

heat. A nuclear attack on a convoy of large merchants, would cause a lot of damage, but would probably not sink the majority of ships. And the U.S. could well retaliate with nuclear attacks against bases which launched the attack.

The Japanese adhere to the three non-nuclear principles because as the Defense of Japan 1986 states "Japan can not possess weapons systems which, from the standpoint of their performance, are used exclusively for the total destruction of other countries, such as ICBMs and long-range strategic bombers."¹⁴ However, the Japanese also officially state that, "against nuclear threat, Japan will rely on the nuclear deterrent capability of the United States."¹⁵ Therefore, Japan's defense against nuclear attack relies on the U.S. nuclear deterrent, as does NATO's. The U.S. alliance system around the world depends on the credibility of American willingness to retaliate for a nuclear attack with nuclear weapons. The United States would be forced to respond, and the Soviets must realize this. A Soviet nuclear attack on Japan could not go unavenged. This makes it unlikely.

B. CONVENTIONAL WAR

After the threat of nuclear attack, the most serious danger to Japan is an invasion. But it is clear from the limited number of Soviet amphibious assault ships and logistics ships, that they do not have the capability to launch a full invasion of Japan.

There is little incentive for a Soviet invasion and numerous difficulties. It would be an extremely difficult campaign. The mountains and steep valleys of Japan provide excellent defensive positions. Even

¹⁴. Defense of Japan 1986, p. 72.

¹⁵. Defense of Japan 1986, p. 80.

outnumbered defenders could inflict heavy casualties on an attacker. Also the Soviets would be faced with a horrendous logistic problem. Most of their invasion supplies would have to be shipped from the manufacturing centers in the western Soviet Union over two rail lines. The supplies would then have to be loaded on ships and delivered to a hostile beach against vigorous U.S. and Japanese opposition. And the Soviet Union would not gain much from outright invasion. Japan lacks most natural resources and the invasion would destroy Japan's industrial and technological base. The Soviets would only gain Japan's strategic position and deny Japanese bases to American forces.

A limited invasion might be attractive however. Securing the northern tip of Hokkaido and controlling both sides of the Soya (La Perouse) Strait would guarantee access to the Pacific Ocean from the naval base at Vladivostok. A limited invasion would need fewer supplies and make achieving local superiority easier. Fewer assault and amphibious ships would be needed. Hokkaido is the most difficult island for the Japanese to resupply and reinforce because it is the most distant from the Japanese manufacturing and population centers. In recognition of this danger, the Japanese have stationed a large part of their ground forces on Hokkaido, with plans to deploy land-based surface-to-surface missiles.

However invading Japan would have the undesirable effect of bringing the United States into the conflict. This could be avoided by interdicting Japan's sea lanes which would put tremendous pressure on the government to accede to Soviet demands. This strategy would probably be much more effective than invading the Japanese homeland.

In the event of a general conventional war between superpowers, the Soviets would want to keep Japan neutral to avoid a two front war. The Soviets could then concentrate on winning a decisive victory in Europe, without having to divert vital resources to the Far Eastern military region. If Japan were neutral, the Soviet Union could demand that the Japanese government restrict the American use of bases in Japan.

Behind this demand would be an implicit threat of further action, such as air strikes against U.S. facilities in Japan, a blockade to prevent the movement of war materials in and out of Japan, an invasion to seize control of the Soya Strait north of Hokkaido, or possible nuclear attack. These would be powerful incentives for Japan to stay out of a superpower confrontation.

A Soviet threat to interdict Japan's SLOC (sea lines of communication), if Japan refused to cease aiding the Americans has several advantages. The Soviets could claim that excessive Japanese support for the U.S. is violating Japanese neutrality, giving their actions some legitimacy. Also, it avoids hostile acts on Japanese homeland, plays on the passivity of the Japanese populace, and carries the inherent threat of more severe measures if the Japanese do not comply with Soviet demands. This would increase the political divisions in Japan, with some Japanese urging an accommodation to the Soviets and others calling for resistance.

It is possible that the Japanese would seek to maintain their neutrality and avoid the destruction of war. In the short term, this course of action would be possible. However the longer the war lasted, the harder it would be for the Japanese to stay neutral. World resources would become increasingly scarce and

the demand for consumers goods would drop as shipping was destroyed and the world economy turned to a war footing. The demand for ammunition and war supplies would skyrocket. Yet if the Japanese, attempted to shift their industries to munitions, this would provoke the Soviets. The Japanese would begin to experience trade declines and economic dislocations.

In the long term, if the war lasted for a year or longer, pressure from the Americans to actively support the war would grow, especially if NATO suffered reverses in Europe. Certainly from the American viewpoint it would be desirable to strike the Soviets in East Asia to keep Soviet Far Eastern Forces from being diverted to the Central Front. The Americans would also want to keep the Soviet Pacific Fleet bottled up in the Sea of Japan, which would be impossible without Japanese cooperation. As the war wore on, American and Japanese interests would probably tend to converge.

A general war would restrict the flow of vital resources, forcing Japan to use existing stockpiles, and making Japan increasingly susceptible to SLOC interdiction. Ironically, the most effective way for Japan to stay out of a major war would be to be able to independently protect Japan's SLOC's. This would eliminate the "hostage" effect of a blockade, by giving Japan the means to effectively counter sea lane interdiction.

III. JAPANESE DEFENSE POLICY: RECOGNITION OF THE SEA LANES

A. CREATING A CONSENSUS

Since the end of World War II, the role of sea lanes in the Japanese defense debate has gone through three phases. From the end of the war until the oil shock of 1973, sea lanes were ignored. From 1973 until 1981 when Prime Minister Suzuki made the commitment to defend sea lanes out to 1000 miles, the government sought to deal with sea lanes indirectly by improving diplomatic relations with suppliers and by diversifying sources. Only since Suzuki's statement in 1981, has the Japanese government began to create a new consensus concerning what military capabilities are required to defend Japan's sea lanes.

Two factors prompted development of Japanese Defense policy: Japan's phenomenal economic growth and the relative decline of U.S. power compared to the build up of Soviet power in Japan's vicinity.

This chapter studies the evolution of Japanese Defense policy from World War II to the present, noting the institutions and policies distinctive to Japan that form the background for the debate on the role of sea lanes in Japanese security. The statements and arguments of opposition parties, scholars, businessmen, and military leaders are examined to show the differing perceptions and shifts in thinking that reflect the recognition of the importance of sea lanes.

The recognition of the importance that sea lanes have in the defense of Japan was almost totally inhibited as a result of the events of World War II. Most Japanese blamed the military for Japan's defeat and devastation, and felt that the military was anti-

democratic and had brought on an unnecessary war.¹⁶ Thus suspicion and fear of the military are deeply rooted in the Japanese society. This anti-military sentiment persists today and is a critical factor in explaining how defense policy evolves in Japan.¹⁷

The government must create a consensus to support its defense policy, which involves devising compromises acceptable to the majority. A discussion of the role of sea lane defense in Japanese defense policy must begin with a review of how the government built a consensus for defense policy since 1945.

Two important historical facts provide a background for the debate. Japan has never in its history been successfully invaded, and was only occupied once, by the Americans at the conclusion of World War II. This means the Japanese are less concerned about external threats and have given less attention to their security requirements in the modern world. The other historical factor is that since 1945, the Soviet Union has occupied the "northern territories," four islands of the Kurile chain claimed by the Japanese. These islands lie across the sea lanes that the Soviet Pacific Fleet at Vladivostok must transit to gain access to the Pacific. The Soviet occupation of these islands has prevented Japan and the Soviet Union from signing a peace treaty to officially end the war, and has created an adversarial relationship between the two nations.

After the war U.S. forces under General Douglas MacArthur occupied Japan, directed its disarmament and

¹⁶. Satoh, Yukio, "The Evolution of Japanese Security Policy" Adelphi Papers, The International Institute for Strategic Studies, Adlard & Son Ltd., Bartholomew Press, Dorking, 1983, p. 2.

¹⁷. Weinstein, Martin E., "Japan's Defense Policy and the May 1981 Summit", Journal of Northeast Asian Studies, 1 March 1982, pp. 29-32.

sponsored a written constitution (1947), containing the anti-war clause, Article Nine, which states:

Aspiring sincerely to an International peace based on justice and order, the Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as a means of settling international disputes.

In order to accomplish the aim of the preceding paragraph, land, sea and air forces, as well as other war potential, will never be maintained. The right of belligerency of the state will not be recognized.

This clause was enthusiastically endorsed by many Japanese and institutionalized the public rejection of the use of military force.

The Korean War precipitated a change in U.S. policy. The movement of American forces into Korea caused Gen. MacArthur to press the Japanese government to assume more of the duties of policing Japan. In July 1950, a para-military National Police Reserve (NPR) of 75,000 was established. Prime Minister Ashida justified this on the grounds that Article Nine of the constitution did not prohibit self-defense. This interpretation, known as the "Ashida-Kiyose Interpretation", allowed the formation of a limited self-defense force.¹⁸

Most historians consider the formation of the NPR to mark the beginning of Japanese post-war defense efforts. However, the Japanese government, with the acquiescence of the Supreme Commander For Allied Powers (SCAP), had established the Maritime Safety Agency two years earlier on 1 May 1948. This limited paramilitary force of 10,000 men and 125 vessels was tasked with patrolling coastal waters and sweeping mines.¹⁹

¹⁸. Satoh, p. 2.

¹⁹. See James E. Auer's The Postwar Rearmament of Japanese Maritime Forces, 1945-71, Praeger Publishers, 1973, pp. 53-89, for a detailed description of the re-emergence of Japan's Maritime Self-Defense Force.

In 1951 48 nations signed the San Francisco Peace Treaty and at the same time the United States and Japan signed a Security Treaty. The U.S. was fighting the Korean War and desired Japan to rearm. In talks with American Secretary of State, John Foster Dulles, Prime Minister Shigeru Yoshida vigorously opposed rearming. Yoshida argued that Japan was a weak economic power, Article Nine of the Japanese constitution prohibited rearming, the Japanese people had a psychological aversion to the military after the war, and a rearmed Japan would create fear among its neighbors. Yoshida proposed that the U.S. defend Japan in exchange for the use of bases. This proposal was accepted. The basic tenet of the Yoshida Doctrine, of cooperation with American forces and reliance on the U.S. for defense, has continued to be a central pillar of Japanese strategy.²⁰

Shortly after the American occupation ended in 1952, the Japanese Diet passed the National Safety Agency Law establishing the National Safety Agency. This law redesignated the National Police Reserve as the National Safety Force and increased its authorized size to 110,000. Part of the Maritime Safety Agency was redesignated the Maritime Safety Force also. The National Safety Agency did not provide for defending Japan from external aggression, however.

After the Korean War, the U.S. offered military aid to its allies, but to be eligible Japan had to have a detailed plan for defense. The Defense Agency Law of 1954 established the Japan Defense Agency and formed the National Safety Force and Maritime Safety Force into three distinct services: the Ground Self-Defense Force (GSDF), the Maritime Self-Defense Force (MSDF),

²⁰. Mochizuki, Mike M., "Japan's Search for Strategy", International Security 8, Winter 83/84, pp. 155-161.

and the Air Self-Defense Force (ASDF). (The Maritime Safety Agency continued as a separate independent service organized as a coast guard.) On the same date the Self-Defense Forces law was passed specifically adding defense against direct aggression as a mission and further delineating the structure, organization, operation and status of the Self-Defense forces. The exact mission of the MSDF was ambiguous however. The Self-Defense Forces Laws simply states:

The primary mission of the Self-Defense Forces shall be to defend the nation against direct and indirect aggression...it shall be the mission...of the Maritime Self-Defense Force to conduct operations chiefly at sea....²¹

No other mission has ever been legislatively authorized. For the first several years this was not important because of the pitifully few ships assigned.

In 1956 the National Defense Council was organized and proceeded to define a national defense policy. The "Basic National Defense Policy" as recommended by the National Defense Council was approved by the Cabinet on 20 May 1954. It stated:

The purpose of national defense is to prevent direct and indirect aggression, and once invaded to repel it in order to preserve the independence and peace of Japan for the blessings of democracy.

To achieve this purpose, the government of Japan adopted the following principles:

1. To support the activities of the United Nations and its promotion of international cooperation, thereby contributing to the cause of world peace.

2. To promote the national welfare and enhance the spirit of patriotism, thereby laying a sound basis for national security.

3. To develop gradually an effective defensive power within the bounds of national capabilities to the extent necessary for self-defense.

4. To cope with aggression by recourse to the joint security system with the United States of America, pending effective

²¹ Self Defense Forces Law, Law No. 165, June 9, 1954. The article quoted is from the Japan Defense Agency, as quoted by Auer, p. 100.

functioning of the United Nations in preventing and removing aggressions.²²

Specific missions for the Self Defense Forces were not listed, nor excluded.

This gave rise to a prolonged debate over whether sea forces can be purely "defensive", what role the MSDF should assume, and whether the MSDF should be a limited, coastal defense force or an ocean-going navy. Generally the civilian defense planners have argued that there is a difference between offensive and defensive warfare, that the MSDF should prevent invasion, infiltration, sabotage and mining, and that it should be a limited coastal guard force. The leaders of the MSDF have tended to hold that there is no difference between offensive and defensive warfare at sea, that the MSDF must defend both Japanese territory and ability to use the sea, and that an ocean-going navy is required.²³

The Basic Policy for National Defense provided the basis for four 5-year "Buildup Plans" from 1958 to 1976. While each of these plans doubled the defense budget in real terms, the defense budget as a percentage of the GNP actually grew smaller as the Japanese economy expanded.

In 1960 the U.S.-Japan Security Treaty of 1951 was replaced by the Treaty of Mutual Cooperation and Security (MST) because of Japanese fears that American use of Japanese bases might involuntarily involve Japan in a war. In the revision, the U.S. agreed to consult the Japanese government on the use of those bases. The Japanese agreed to accept responsibility for developing limited means of initially resisting armed attack,

²². Defense of Japan 1970, The Japan Times, Ltd., 1970, p. 2.

²³. Auer, p. 133.

until U.S. forces could come to their aid. The main aspect of the MST was Article 5, which stated:

Each party recognizes that an armed attack against either party in the territories under the administration of Japan would be dangerous to her own peace and safety and declares that it would act to meet the common danger in accord with its constitutional provisions and processes.²⁴

Through the 1960's Japan's economy greatly expanded, but defense spending, decreased as a percentage of the GNP. In 1967, Prime Minister Sato announced that Japan would adhere to three Non-nuclear principles: of not possessing nuclear weapons, not producing them, and not permitting their introduction into Japan. These principles have become a continuing aspect of Japanese defense policy; reiterated on several occasions by unanimous Diet resolutions and reaffirmed by each succeeding government.²⁵ In the same year the Diet passed a resolution eliminating arms exports to communist countries, countries to whom arms exports were banned by a resolution of the United Nations, and countries engaged in international conflict. In 1976 these restrictions were expanded to preclude virtually Japanese arms exports altogether.

Most historians mark the end of the postwar period in Japan by the reversion of Okinawa to Japanese jurisdiction in 1972. This is a convenient political event, but it was the Arab Oil Embargo in 1973, and resultant shock to the Japanese economy, that brought the divergence of Japanese and American interests into sharp focus. This was the impetus for a new direction in Japanese defense policy.

During the period of 1945-1973 the Yoshida Doctrine was appropriate for Japan. It allowed the country to

²⁴. Buck, James H., Japan's Defense Policy, Armed Forces and Society, Vol. 8, Fall 1981, p. 81.

²⁵. Satoh, p. 5.

pursue economic development and relegated defense to a low priority. During this time Japanese debated the issue of the legality of defense, not strategy. Sea lane defense was dismissed as "too offensive" and "not authorized." But by 1973 Japan had reestablished herself diplomatically in the international community and had emerged as an economic power. Japan outgrew the Yoshida Doctrine. In the later part of this period some Japanese began to air more self-interested views on defense, such as the concern that American use of Japanese bases during the Korean and Vietnam wars may have endangered Japan more than protected it.²⁶ Up to 1973, Japanese defense policy was reflection of what the United States deemed appropriate for Japan. After 1973, Japan's policies exhibited increasing independence from the United States.

The period from 1973 to 1980 was marked by a change in the global balance of power and Japan's continued economic growth. The United States ceased being the world's predominant military power and began to rely more on its allies. Western Europe, Japan, the newly emerging industrialized nations of Asia, and the oil producing nations Middle East gained in economic power and international influence. The concurrent buildup of Soviet power in the Pacific placed Japan in an increasingly vulnerable position.

Japan's growing economic strength transformed the trade relationship with the United States from one of "economic partners" to "economic rivals." Controversy erupted over textiles in 1971 and later over soybeans.²⁷ The "Nixon Shocks" over the U.S. rapprochement with China showed an American lack of

²⁶. Sayle, Murray, "The Yellow Peril and the Red Haired Devils", Harper's, November 1982, p. 34.

²⁷. Sayle, p. 35.

concern for Japanese sensitivities. The Oil Crisis of 1973 revealed to Japan that the United States could not provide oil in an emergency.

In addition, several events seemed to signal a reduced U.S. presence in Asia. The American departure from Vietnam and subsequent fall of Saigon in 1975, and Jimmy Carter's proposal to unilaterally withdraw some of the American troops from South Korea, seemed to indicate an American unwillingness to meet security commitments. In January 1979 Washington abrogated the U.S.-Taiwan Defense Pact. Then the Iranian Revolution and subsequent hostage crisis caused the U.S. to deploy units from the Seventh Fleet to the Indian Oceans, reducing its Pacific presence.

Meanwhile the international environment in Asia grew more threatening. In 1978 Vietnam invaded Kampuchea, followed shortly by a punitive Chinese invasion of Vietnam. In 1979 the Soviets sent troops into Afghanistan and began to use naval and air bases in Vietnam.

These events changed the Japanese defense debate from questions of the constitutionality of the Self Defense Forces and whether or not to maintain the MST with the United States, to a more practical appraisal of an appropriate defense strategy for Japan. Modernization of the SDF, closer cooperation with U.S. forces, and a possible enlargement of Japan's role in sea lane defense began to receive government attention.

The change became evident in The National Defense Program Outline (NDPO) of 1976, which was the first official Japanese definition of defense requirements. The NDPO introduced the "standard force" concept; a minimum force composition designed to repel a "limited and small-scale aggression." It did not recommend increasing the size of the self-defense forces, but did

recommend modernizing its equipment and enhancing Japan's air defense and anti-submarine capabilities. Table II lists the NDPO force levels.

TABLE II: NATIONAL DEFENSE PROGRAM OUTLINE

GSDF

12 Divisions (including one armored)
2 Composite brigades
8 Antiaircraft artillery groups
180,000 personnel

MSDF

ASW escorts flotillas	4 Flotillas
ASW regional district units	10 Divisions
Submarines units	6 Divisions
Minesweeping units	2 Flotillas
Land-based ASW aircraft units	16 Squadrons
60 ASW ships (approx.)	
16 submarines	
220 aircraft (approx.)	

ASDF

Aircraft Control and Warning Units	28
Interceptor Units	10
Support/Fighters	3
Air Reconnaissance Units	1
Air Transport Units	3
Early Warning Units	1
High-Altitude SAM Units	6

430 combat aircraft (approx.)

Source: Defense of Japan 1986

At the time the NDPO was released, the Miki cabinet announced that defense spending would be limited to one percent of the GNP, allaying fears that militarism was rising in Japan. This was much less than most modern industrialized nations spend, but the policy was endorsed by each successive government until 1987.

The limit on defense spending served to allay domestic and international fears of a rearmed Japan, and also points out the fact that the Japanese government was not turning to a military strategy for the defense of Japan. As further evidence for this, the late 1970's saw a sharp increase in Japanese economic assistance to Egypt, Turkey, Pakistan and Thailand. This was a natural outgrowth of the 1960's

policy of economic diplomacy (seikei bunri or separating economics from politics) which enabled Japan to trade with nations regardless of their espoused ideology or political ties. In this way the Japanese began to expand their foreign relations independently of the United States.²⁸

Japan did not hesitate to maintain trade relations with countries unfriendly to the United States. In some cases Japan traded with co-belligerent states, such as North and South Korea, and Iran and Iraq. For example, Japan has assisted South Korea in establishing heavy industry with loans and expertise. North Korea was also encouraged to seek Japanese investment and technology, but Japan has little influence there.

Japan does not officially provide any foreign military aid. However, "in November 1982 Japan [made] direct contributions to the United Nations peace-keeping force in Lebanon in the form of funds and non-combatant materials."²⁹ Japan also has been contributing financially for many years to U.N. peace-keeping operations, in Cyprus, on the Indo-Pakistan border and in the Middle East.

Japan has continued this form of meeting its international obligations with financial assistances and contributes aid to the Philippines, Thailand, Oman, Pakistan, Jamaica, Turkey, and Central and South America. Japan now provides the world's second largest amount of economic aid, known as Official Developmental Aid (ODA) in Japan, to developing countries. Between 1986-90 this will amount to \$40 billion. Japan also contributes to China, ASEAN, Egypt, Kenya, Tanzania, Sudan and Somalia.

²⁸. Barnett, Robert W., Beyond War, Pergamon-Brassey's International Defense Publishers, 1984, pp. ix-xx.

²⁹. McIntosh, p. 36.

However a purely economic diplomacy was an inadequate policy in light of the increasing economic power of Japan and the relative decline in U.S. power compared to the Soviet Union. In April 1979, Prime Minister Ohira appointed a committee, chaired by Dr. Masamichi Inoki, former head of the Japan Defense Academy, to make recommendations on a Comprehensive National Security. The recommendations were reported to Ohira's successor, Acting Prime Minister Ito in July 1980.³⁰

In 1980, Prime Minister Suzuki felt that the Self Defense Forces (SDF) were inadequate to repel an invasion. This may have been encouraged by the comment made by a Soviet diplomat to a Japanese journalist in 1978, that "the invasion of Japan would take only several tens of minutes if we did it in earnest."³¹ The SDF had low stocks of ammunition, poor air surveillance (in 1976 a Soviet Mig 25 landed in Hokkaido after flying around for over an hour without detection), the BADGE air defense system was outdated, and the Soviet Pacific Fleet in Vladivostok was expanding. To redress this imbalance the 1980 Comprehensive Security Group called for a 20 percent increase in defence spending. The military budget has averaged a 6 to 7 percent annual increase since.

The committee considered Japan's lack of resources, the need to trade for survival, the reliance on the American alliance, and its geo-political location in making its recommendations on security policy. The concept of Comprehensive Security combines diplomacy, commerce, and military force, but considered the first two more effective. It is based on the assessment that the threat to Japan is less military and more likely to

³⁰. Barnett, p. 66.

³¹. Far East Economic Review, April 20, 1979, p. 29.

come from a collapse of international capitalism, an oil shortage or protectionism. "In 1980 Prime Minister Suzuki said, 'We cannot protect Japan's security by military force alone. An overall policy of diplomacy, economy, and security is necessary.'"³²

The committee's second most important finding was for the continued reliance on the Japan-U.S. Mutual Security Treaty (MST). The Report on Comprehensive National Security states that:

Japan's defense policy has been based on the stance that Japan, under the Japan-U.S. security arrangements, relies upon the United States for nuclear deterrence and for the repelling of large-scale aggression, and resists small-scale and limited aggression with conventional forces by itself...³³

Implicitly this policy relies on the U.S. to protect the sea lanes. Comprehensive Security is rooted in the Yoshida Doctrine's reliance on the U.S. for security. But it also recognizes that Japan must do more for its own defense. The perception that defense was becoming less a question of legality and more a question of policy and therefore a legitimate legislative concern open to public debate, was reflected in the Diet's decision to establish Special Committees on National Security in 1980.

The opposition parties also shifted their positions on the MST, accepting all or part of the government's security arrangements. Although the Democratic Socialist Party (DSP) and Japan Socialist Party (JSP) probably changed their position more out of concern that the "Peace Constitution" might be revised, than out of an acceptance of the principles of the MST, the change is still significant. The DSP began supporting the SDF in the late 1970's and the Komeito Party in 1981. The JSP softened their support of an 'unarmed

³². McIntosh, p. 37.

³³. Barnett, p. 3.

neutralist' policy. Only the Japanese Communist Party (JCP) called for the abolition of the MST, although they supported independent military forces for Japan.³⁴

This set the stage for the Japanese government to expand its role in sea lane defense. Up to 1981, Japan's Maritime Self-Defense Force (MSDF) was restricted in its mission to within a few hundred miles of the coast, and only then when there was a direct threat to Japanese territory. In 1981, the Japanese government decided to expand the role of the MSDF to include protection of its shipping. Prime Minister Zenko Suzuki, in a meeting with President Reagan in May 1981, announced an increase in Japan's defense responsibilities "in Japanese territories and in its surrounding air and sea space" up to 1000 nautical miles.³⁵ Suzuki's successor, Nakasone, reiterated this policy in a January 18, 1983 interview with the Washington Post, by stating that Japan would become an "unsinkable aircraft carrier," would extend its "complete and full control" of the Japanese straits to block passage of Soviet ships and submarines, and would "secure and maintain" sea lines of communication.³⁶ (See Figure 2 for a map of the Japan and the three straits.)

In March 1983, Japan and the United States conducted a joint study of sea lane defense, but it is still unclear what role Japan will play. At first, the Japanese government stated that the Maritime and Air Self-Defense Forces would be expanded so that in emergency situations they would be able to escort ships carrying vital resources to Japan along the Tokyo-Guam

³⁴. Satoh, p. 39.

³⁵. "Japan-U.S. Communique," Japan Times, 10 May 1981.

³⁶. Bouchard, Joseph F., and Douglas J. Hess, "The Japanese Navy and Sea-Lanes Defense," United States Naval Institute Proceedings, No. 110, March 1984, pp. 90-97.



Figure 2: The Straits into the Sea of Japan

and Osaka-Bashi Channel sea lanes (between Taiwan and the Philippines). Subsequent Japanese Defense Agency statements indicate that sea lane defense will not be restricted to particular channels, but will be the result of cumulative efforts of anti-submarine patrol, sea lane escort, and strait blockading operations.

The Japanese MSDF by itself does not have the capabilities to counter the threat posed by Backfire bombers and the Soviet Pacific Fleet. Therefore Japanese sea lane defense is heavily dependent on close coordination with the U.S. Navy.

The Japanese SDF may aid American forces inside the Japanese defense perimeter in an emergency. But joint operations with the U.S. Navy, in conditions less than a direct attack on Japan, are controversial. Many Japanese feel this is too close to the concept of "collective defense," which is a violation of the Japanese Constitution.

Given the close cooperation between the two governments in this area, it is equally understandable why many Japanese observers suspect that Japan's own sea lane defense development is designed not so much for the country's own self-defense as for fulfilling Japan's role in the anti-Soviet Western alliance."³⁷

The present government's position is that closing the straits to the Sea of Japan, either alone or with U.S. forces, is within the limits of self-defense, "but only when the country is attacked or facing an imminent attack."³⁸ As yet there is no consensus among Japanese on this issue.

Several events have forced the Japanese government to recognize the "potential" threat the Soviet Union poses to Japan. On 1 September 1983 the Soviets shot down a Korean airliner over Sakhalin to the north of

³⁷. Akaha, p. 273.

³⁸. Bouchard and Hess, p. 92.

Japan. In 1985 the Soviet Pacific Fleet carried out a its largest exercise ever in the waters surrounding Japan. Other Soviet actions which have shocked the Japanese include the stationing of Soviet forces on Sakhalin and the disputed territories. In 1976 the Soviets began to demand passports for Japanese visiting graves on the Kuriles, and in 1977 they extended a 200 mile fishing zone around the island, excluding the Japanese from one of the world's most productive fishing areas and preventing the collection of seaweed --a food staple.

Japan's economic growth, the changing global and regional balance of power, and poor diplomatic relations with it's powerful neighbor have caused many Japanese to change their perception of Japan's role in the world. Many officials of the government feel that Japan should do more in its own defense. Some feel Japan should defend its sea lanes out to 1000 miles. But there is still no consensus on sea lane defense.

B. CONFLICTING PERCEPTIONS OF THE IMPORTANCE OF SEA LANES IN JAPAN'S DEFENSE

Since 1945, the Japanese have had conflicting perceptions about defense policy. The government, the public, and the military have had differing views of the threat and what constitutes the proper response. Within each of these groups there is also considerable divergence of opinion. As a result, Japanese defense policy was the product of compromises over individual policy decisions, and lacked the common view necessary for a unified, comprehensive national defense strategy.

Scholars, journalists, politicians, businessmen, bureaucrats, and military leaders have debated defense in Japan. Several distinctive schools of thought have

emerged from this debate and over the years the issues have changed as perceptions of the external environment and Japan's role in the world changed. Gradually, the opinion that Japan has a legitimate right of self defense has been accepted and the debate has centered more over what that right includes.

Tetsuya Umemoto analyzed the statements of scholars and journalist in Japan and found that the debate over defense distinctly shifted to the right (that is, to the belief that Japan has a legitimate right to self defense) in the 1970's.

He identified three schools of thought based on values the proponents felt were most important to Japanese society. He says, "National defense presupposes a crisis in which a nation is confronted by the necessity to sacrifice some values in order to safeguard others."³⁹ The three schools of thought are: "idealism," "realism," and "transcendentalism."

Idealism was strongest after World War II and gave rise to "utopian pacifism" and the belief in "unarmed neutrality" as the best course of action for Japan.

Idealism rejects the balance-of-power policy along with its derivative, the policy of deterrence, nuclear or nonnuclear, as conducive to arms race and war and dismisses Tokyo's military efforts in accordance with the MST-SDF formula as unnecessary, futile, and dangerous.⁴⁰

Idealists emphasized that the "safety and well-being of individual citizens should take precedence over all other objectives."⁴¹ Everything was secondary to the individual, even the survival of the state. The MST-SDF formula refers to the Japanese reliance on the Mutual Security Treaty with the United States for

³⁹. Umemoto, Tetsuya, Arms and Alliance in Japanese Public Opinion, Ph.D. Dissertation, Princeton University, Princeton, New Jersey, 1985.

⁴⁰. Umemoto, p. 97.

⁴¹. Umemoto, p. 99.

deterrence of nuclear attack and large-scale aggression, and on the Self-defense forces for deterring small-scale attacks. The idealists reject this approach because they can not accept an individual sacrificing his life to defend the state. Also the idealists fail to see a significant threat to Japan, since it is protected by water and, with no natural resources, hardly worth invading.

The idealist position was challenged by the realists who believed that the international system was based on the balance of power and that peace was being maintained by the superior military ability of the United States.

Realism places power balance and deterrent military capability in the center of its world view, maintains that defense endeavors under the MST-SDF formula are necessary, effective (if carried out a little more vigorously, anyway), and undangerous, but opposes such endeavors coming into conflict with the essence of the "institutionalized constraints."⁴²

The realists argued for strong ties with the United States and development of the SDF under the institutional constraints: Article Nine of the constitution, the three non-nuclear principles, the non-export of arms, and the limit on defense spending.

Umemoto finds that up to the late 1970's the debate over Japan's security policy was principally between the idealists and the realists. But as Soviet military power increased and American power declined, the idealist argument lost some of its persuasiveness. Since the late 1970's most Japanese debate has shifted from the idealist-realist controversy to the realist-transcendentalist debate.

The transcendentalists argue that the "essence of Japan" is necessary for the health of society. The

⁴². Umemoto, p.197.

individual must make at least some sacrifices to the state.

The transcendentalists hold that the SDF must be expanded beyond the limits of the institutional constraints. The MST is unequal, and therefore must be abolished: It demeans the sovereignty of Japan. The transcendentalists agree with the realists that power is the basis of the international system. But the transcendentalists would remove the limits to military growth.

Transcendentalism finds common ground with realism concerning the balance of power and deterrence as well as the necessity of military undertakings in the context of the alliance with the United States, but asserts that such undertakings will remain woefully ineffective unless steps are taken fundamentally to alter or scrap the "institutionalized constraints."⁴³

The realists and the idealists disagree on the nature of the international system, but they both agree that the strength of the SDF must be limited. With the rising awareness of the expansion of Soviet power, Umemoto says the debate between the transcendentalists and the realists has become predominant.

Another American specialist on Japanese defense, Mike Mochizuki (Assistant Professor of Political Science at Yale University) similarly describes Japanese strategic thinkers but divides them into four schools by separating the realists into two groups.⁴⁴ Mochizuki's divisions include the "unarmed neutralists" (moderate-to-far left), "political realists" (moderate/left), "military realists" (moderate/right), and "Japanese Gaullists" (far right).⁴⁵

⁴³. Umemoto, p. 198.

⁴⁴. See Frank Langdon's "The Security Debate in Japan," Pacific Affairs, Vol 58, No. 3, Fall 1985, for a similar view of this debate.

⁴⁵. Mochizuki, Mike M., "Japan's Search for Strategy", International Security 8, Winter 83/84, p. 158.

The unarmed neutralists (Umemoto's idealists) and Japanese Gaullists (Umemoto's transcendentalists) are fewer in number and less influential than the realists. The political realists and military realists are well represented in the LDP (Liberal Democratic Party) and the government. The political realists constitute the mainstream of Japanese politics, carrying on in the Yoshida tradition. But the military realists may be growing more influential as indicated by the term of former Prime Minister Yasuhiro Nakasone, perhaps the best known military realist.

According to Mochizuki, in the 1970's, the unarmed neutralist's argument that the U.S.-Japan Security Treaty endangered Japan lost some of its persuasiveness due to the American withdrawal from Vietnam, U.S.-Soviet detente, and, later, the U.S.-China rapprochement. The collapse of detente has caused the unarmed neutralist's to restructure their arguments to block the expansion of the Japanese military and the incorporation of Japan into American military strategy.

The Japan Peace Research Group, headed by Yoshikazu Sakamoto of the University of Tokyo, serves as a focal center for the unarmed neutralists. Some other noted strategists of this school include Takeshi Ishida, Kinhide Mushakoji, Hiroharu Seki, Jiro Kamishima, Takehiko Kamo, Hisao Maeda, Michio Morishima, Shigeto Tsuru, and Masashi Ishibashi, a member of the Japan Socialist Party.⁴⁶

The unarmed neutralists argue that the Soviet Union is not a realistic military threat to Japan. Hisao Maeda makes this argument in an article he wrote for the Japan Quarterly, saying:

The recent noisy farce of the budget-compiling process suggests that it is more correct to regard the threat to Japan as coming from the

⁴⁶. Mochizuki, p. 163.

pressure of the United States, not the military buildup of the Soviet Union. The United States would like to force Japan to build up its military strength and integrate it into U.S. global military strategy. In fact, even if the Soviet Union were building up its military force as insisted by the United States and the Defense Agency, this would not be directly to Japan's disadvantage.⁴⁷

The unarmed neutralists argue that Japan is much more threatened by its economic vulnerability due to its dependence on imports of raw materials and exports to foreign markets. They favor terminating the U.S.-Japan Security Treaty to prevent Japan from being dragged into a superpower dispute, and the signing of friendship treaties with Japan's neighbors. The neutralists oppose revising the constitution or relaxing any of the constraints on a military buildup.

Regarding military forces, the unarmed neutralists oppose further expansion of Japan's military and propose reinforcing civilian control of the SDF. Despite Japan's dependency on the sea lanes, the unarmed neutralists oppose the development of a large navy. They cite the inability of Japan's large Imperial Navy to secure the sea lanes during World War II as proof of the futility of such a strategy today. Although the unarmed neutralists have little direct impact on policy, the widespread public appeal of their pacifistic arguments constrains government action.⁴⁸

Mochizuki feels that the influence of the Japanese gaullists was greater in the post-war period but has declined through a lack of support in the government or the public. The most prominent gaullists include Jun Eto, Tetsuya Kataoka, Yatsuhiko Nakagawa and Ikutaro Shimizu.

⁴⁷. Maeda, Hisao, "The Free-Rider Myth", Japan Quarterly, Vol. 24, April/June 1982, p. 176.

⁴⁸. Mochizuki, p. 164-5.

The Japanese gaullists fear the Soviet military threat and doubt the U.S. will keep its commitment to defend Japan. They desire a complete revision of the security treaty to place Japan and the United States in an equal alliance. The gaullists argue that Japan can not be a sovereign nation until the political system is transformed and Japan has an independent military commensurate with its economic strength. Tetsuya Kataoka, in Waiting for "Pearl Harbor", argues that this transformation will result from a national security crisis.

The most likely form the Japanese state will take on the morrow of a security crisis is Gaullism: Japan will be fully capitalist, but more republican than democratic in character; she will be a true equal of the United States in a defensive alliance and an even stauncher friend than today; but she will ask for autonomy in defense of the western Pacific.⁴⁹

The gaullists propose revising the constitution to remove Article Nine, and removing the institutional constraints imposed on defense policy.

The gaullists desire military forces capable of national power projection and independent deterrence. A representative study by the Military Science Research Group calls for the development of nuclear weapons, four carrier task forces, and seventeen destroyer escort flotillas. The ASDF should have 350 F-15 interceptor aircraft, 30 early warning aircraft, and 300 hundred tactical bombers. The GSDF's armored component should be increased from its present 48 tanks per division to 200 or 300. However the gaullists influence remains limited.⁵⁰

The political realists, Mochizuki states, are "the inheritors of the Yoshida strategy and now form the

⁴⁹. Kataoka, Tetsuya, Waiting for a "Pearl Harbor", Hoover Institution Press, 1980, p. 2.

⁵⁰. Mochizuki, p. 168.

mainstream of Japanese strategic thought."⁵¹ They are most concerned with the political and diplomatic implications of security policy, and the trade-offs between economic welfare and military expenditures. The political realists oppose the development of autonomous defense because of the economic and political costs. The Research Institute for Peace and Security (RIPS) is their main strategic research center. The president of RIPS is Masamichi Inoki and other members include Masataka Kosaka, Seizaburo Sato, Fuji Kamiya, Shumpei Kumon, Masamori Sase, Masashi Nishihara, and Kiroshi Kimura. Yonosuke Nagai is another well-known political realist who is not a member of RIPS.

The political realists fear losing the U.S. security guarantee, the danger they see from the Soviet Union is more political than military, and they are concerned by Japan's economic vulnerability. Some advocate stockpiling key resources and others favor using economic assistance programs to foster close ties with critical suppliers of raw material and other strategically important countries. Political realists want to strengthen the U.S.-Japan security alliance by sharing more of burden of western defense. They do not see any need to revise the constitution or the U.S.-Japan security treaty.

Most political realists feel that the force levels outlined in the National Defense Program Outline (NDPO) are sufficient in quantity but should be qualitatively improved. The 1980 Report on Comprehensive National Security (RCNS) accurately and succinctly portray's the political realists position. It criticized the combat capability of the SDF and the lack of an integrated command and control between the three services. It

⁵¹. Mochizuki, p. 158.

recommended a 20 percent increase in the defense budget to qualitatively improve the SDF so that it would have a "denial" capability against "limited and small-scale aggression." The RCNS mentions the importance of securing the sea lines of communication, but does not specifically assign that mission to the MSDF. The report does not mention other missions such as blocking the three straits or contributing to the U.S. Seventh Fleet during a Middle East crisis. Some political realists support the NDPO's concept of a force balanced among the ground, maritime, and air forces, and while others reject the NDPO and favor enhancing one or the other of the services.⁵²

The political realists are the dominant school of strategic thought in Japan and have the most influence over policy. Generally, they seek improvement of Japan's global image and accommodation with the United States. In the words of Masahi Nishihara:

With its much larger economic power than in 1960, and with feelings of greater threat to its security interests, Japan is gradually sharing its international responsibilities in defending the interests of the free world. What is emerging is a sense of alliance, by which Japan has resolved to ally itself more closely with the West.⁵³

Mochizuki feels that military realism is a new strategic perspective which arose as a result of the changes in Japan's external environment, particularly the relative decline of American global power and the trade frictions between the U.S. and Japan. The military realists are likely to have a significant impact on Japan's effort to form a new strategic doctrine. Hisahiko Okazaki is the most widely published representative of this school. Others are

⁵². Mochizuki, p. 162.

⁵³. Nishihara, Masahi, "Expanding Japan's Credible Defense Role", International Security, Vol. 8, No. 3, Winter 83/84, p. 205.

members of the Japan Center for Strategic Studies (JCSS), their main research center, including Shin Kanemaru as president, Noboru Minowa, Masao Horie, Shigeto Nagano, Kenichi Kitamura, Ryuhei Ohga, Goro Takeda, and Jun Tsunoda.⁵⁴

The military realists begin by assessing the most likely military threat and then devise a strategy to meet it. Unlike the political realists, the military realists do not believe that a distinction can be made between a potential adversaries's intentions and military capabilities. Therefore, they focus on military capabilities. The military realists favor closer military cooperation with the United States and analyze the threat to Japan in terms of the global and regional U.S.-Soviet military balance. Nuclear parity between the superpowers and the loss of American conventional superiority in the Pacific due to the Soviet buildup, have brought into question the U.S. ability to deter war. Therefore Japan must examine the possible scenarios which could involve it in war.

The military realists believe that Japan's position on the three straits (Soya, Tsugaru, and Tsushima) through which the ships of the Soviet Pacific Fleet must pass to get to the Pacific, mean that Japan can not remain neutral in a superpower confrontation. A quote by Hisahiko Okazaki illustrates the logic of military realism.

It is natural for a major country to occupy a strategically important area before an adversary takes it. Particularly if a country occupies a geostrategically important place and is not sufficiently prepared for the defense either by its own forces or by an alliance.... These facts are sufficient to refute an argument by Japanese leftists that Japan will be involved in the war because of the existence of American bases in Japan, and,

⁵⁴. Mochizuki, p. 169.

therefore, the Security Treaty is not securing the peace but endangering it.⁵⁵

At the least, Soviet air and naval power would threaten Japan, and the Soviets might attempt to seize the northern tip of Hokkaido to guarantee passage through the Soya strait. The military realists believe the only way to prevent this invasion is to make a Soviet attack in East Asia extremely costly.⁵⁶

To accomplish this, the military realists want to strengthen the U.S.-Japan Alliance. Autonomous defense can not guarantee Japan's security. Only an increase in Japan's defense capability coupled with closer U.S.-Japan defense cooperation can do that. All military realists support increased defense spending, but there is disagreement over whether it can be done in the existing legal structure. Some military realists argue that the U.S.-Japan security treaty and the constitution must be revised. Others insist that the treaty and constitution can be reinterpreted to provide the legal framework.⁵⁷

The military realists argue that the SDF under the NDPO force levels are both "quantitatively inadequate" as well as "qualitatively deficient". In view of the Soviet interest in securing use of the three straits, and its ability to pressure Japan by interdicting the SLOCs, the military realists emphasize the importance of defending the straits and adjacent territory, and of SLOC protection. These missions require expanding the NDPO force structure.

In a report presented to the Japanese government in 1981, the military realists in the JCSS recommended force increases to carry out these missions. To defend

⁵⁵. Okazaki, Hisahiko, A Grand Strategy for Japanese Defense, University Press of America, 1986, p. 124.

⁵⁶. Mochizuki, p. 171.

⁵⁷. Mochizuki, p. 172.

Hokkaido and the Soya strait the report called for eleven interceptor squadrons, four support fighter units, an air defense missile unit, and additional ground forces. The NDPO only calls for ten interceptor squadrons and three support fighter units. Some military realists also call for the formation of a seaborne assault brigade and an airborne division. To defend against the air threat to Japanese SLOCs posed by Soviet Backfire bombers, the report recommended stationing long-range fighter squadrons and airborne warning and control system (AWACS) units on the Bonin (Ogasawara) and Volcano (Kazan) islands. Against the Soviet submarine and surface ship threat to the SLOCs the report would add more P-3C land-based anti-submarine aircraft and equip them with harpoon (anti-ship) missiles. In addition, the report called for another unit of anti-submarine helicopters, one or more additional escort flotillas beyond the four designated in the NDPO, and several nuclear powered anti-submarine submarines. Finally the report recommended improved minelaying capabilities for strait defense and forming a missile ship unit for operations in the Japan Sea and around Hokkaido.⁵⁸

Most realists do not advocate a Japanese nuclear force: relying instead on the United States. The military realist doctrine could be called "joint U.S.-Japan deterrence," with the U.S. supplying the nuclear aspect and the offensive part of the conventional deterrence, and Japan supplying the defensive forces of the conventional deterrent. In the 1970's most of the military realists were retired military officers, but in the 1980's many government officials and scholars have adopted this view.

⁵⁸. Mochizuki, p. 175.

The four schools are divided by their view of the threat to Japan, and what the appropriate response should be. Each sees sea lane defense in a different light. The unarmed neutralists see no military threat, oppose the expansion of the military, and feel that the sea lanes can not be protected. The gaullists fear the Soviets and doubt the American commitment to Japan. They seek an independent deterrent and desire a strong navy including aircraft carriers and seventeen destroyer escort flotillas. The political realists fear the Soviets but rely on the U.S. deterrent. They want to improve the quality of the SDF to show their willingness to share the burden of defense, but not their size. They recognize the importance of sea lane defense, but make no provision for it. The military realists are alarmed by the Soviet threat and America's decline. They want to strengthen the U.S.-Japan alliance, and upgrade the Japanese capability to defend the sea lanes by increasing the quality and the size of the armed forces.

Most Japanese defense commentators fall into one of the four schools, although each has his own variations. And, of course, all of the schools include adherents from different segments of Japanese society. But groups, such as political parties, businessmen, and military leaders, with common beliefs or interests tend to have similar views of sea lane defense. These groups have significant influence on policy and will be examined next.

The individual opposition parties in Japan have not affected security policy directly because the LDP has been in power for the last thirty-two years. However, as a group, they influence the LDP by forming coalitions, arousing public opinion, and forcing compromises in the Diet.

The defense positions adopted by the opposition parties are affected by considerations of how to gain political advantage or support. Thus their shifts on defense issues indicate their perceptions of public opinion. Since the late 1970's, the three of the four major opposition parties have shown an increased acceptance of the U.S.-Japan Security Treaty and a greater role for Japanese in defense. The defense positions of the Japanese Communist Party (JCP), the Japan Socialist Party (JSP), the Komeito (Clean Government Party), and the Democratic Socialist Party (DSP) will be examined next.

The Japanese Communist Party (JCP) has steadfastly demanded the abrogation of the U.S.-Japan Security Treaty. They also call for the dissolution of the SDF as presently constituted because they see it as a tool of the "reactionary" American imperialists. Once the MST is dissolved, Japan should organize an independent military which will guarantee its status as a neutral nation.

The JSP is the largest opposition party, consistently receiving from one quarter to one third of the vote. In the early 1950's the JSP vigorously opposed the LDP government's defense policy, championing the cause of unarmed neutrality. The security treaty with the U.S. was regularly denounced, although the specific proposals for its termination were never officially stated. The JSP's position on the SDF was tempered by a readiness to consider certain conditions that must be met before their disestablishment.

Toward the end of the 1970's the JSP also began to state that certain preconditions were required for the termination of the U.S.-Japanese alliance. The JSP Central Executive Committee in September 1979 declared

its policy to be one of "entering into negotiations [with the United States] with a view to abrogating the Mutual Security Treaty."⁵⁹ At about the same time, JSP also linked severing the MST with the transformation of the international situation around Japan. At this time the JSP also stated that abolishment of the SDF would take into consideration "political preconditions such as popular domestic support and relaxation of global and regional tension."⁶⁰

By the 1980's the abrogation of the MST had become an ideal or long-range goal of the JSP, and it concentrated on impeding the growth of Japan's military contribution to the U.S.-Japan alliance. On the SDF the JSP also softened its stance further, formally declaring that it would limit its efforts to ensuring civilian control of the military and to cutting defense spending. By opposing the enlargement of the SDF, the JSP tacitly accepted their existence. In February 1984, the party national convention advanced the "unconstitutional but legal" theory, justifying its de facto recognition of the SDF, arguing that they exist legally on the basis of Diet decisions.

The Komeito, formed in 1964, has shifted its position on defense the most dramatically of the four. At first it sought "phased liquidation" or "early liquidation" of the U.S.-Japan Security Treaty. The Komeito challenged the constitutionality of the SDF and called for reorganizing the SDF into an acceptable "Territorial Guard Force."⁶¹

The relaxation of tensions in Asia in the early seventies led the Komeito advocate the "immediate

⁵⁹. Shakai Shinpo, (semiweekly newspaper put out by the JSP), 11 September 1979, as quoted by Umemoto, p. 168.

⁶⁰. Umemoto, p. 172.

⁶¹. Umemoto, p. 164.

denunciation" of the MST and to declare that the SDF was designed to serve U.S. interest. However, by 1975 its official policy on the MST had softened to "abrogation by consent through diplomatic negotiations."⁶² And then for the years 1975 to 1980, its policy statements did not mention the unconstitutionality of the SDF at all.

The Komeito party convention in 1980 struck out the negative characterization of the Mutual Security Treaty, and stated that its abrogation would take place in the future, if it should at all. By 1981 the Komeito recognized that the MST was "playing a certain role as a deterrent in the security of Japan," and was ready to support retention of the MST until an improvement in the international environment. In the same year the Komeito gave its stamp of approval to the SDF by stating that "the present Self-Defense Forces and the capability to preserve territorial integrity as advanced by the CGP [Komeito] had much in common."⁶³

But the Komeito has steadfastly refused to accede to Japan's assuming more of the defense burden with the United States, or to revising the National Defense Program Outline, or to breaking the one percent limit on defense spending. It has especially opposed the SDF participation in sea lane defense.

Since its formation in 1960, the DSP has rejected the immediate denunciation of the MST in favor of "phased liquidation," holding that abrogation of the treaty would create a power vacuum around Japan. In lieu of its eventual liquidation the MST would be revised to remove its most irksome drawbacks (such as the stationing of U.S. troops in Japan). The DSP

⁶². Umemoto, p. 161.

⁶³. Komei Shinbun, 27 October 1981, as quoted by Umemoto, p. 163.

upheld the necessity for a minimum of military capability, but was vague about the role the SDF should have in the security pact with the U.S.

By the early 1970's the DSP was more inclined than ever to renounce the military pact with the United States. However in November 1975, the DSP began to move away from terminating the alliance and began to acknowledge the positive aspects of the security pact. The DSP began to view the function of the SDF in light of military burden sharing.

In its annual policy statement in 1980 the DSP declared the force levels in the NDPO inadequate and began to call for its revision. The national convention, in February 1981, advocated "firm maintenance" of the bilateral military tie and "concretization of the Guidelines for U.S.-Japanese Defense Cooperation," accepting the necessity for greater military burden sharing.⁶⁴

Recently the DSP has assumed that defense spending would inevitably exceed the one percent limit and have generally favored expanding the roles of the SDF.

The national convention has since 1982 continued to approve a policy statement containing passages to the effect that the Japanese military should not confine itself to the defense of its homeland but assume responsibilities for ensuring the safety of the sea lines of communication.⁶⁵

In addition, the DSP supports studies on how the Japanese should assist the U.S. in emergencies outside their territory. The DSP has come to support the U.S.-Japan Security Treaty as fervently as the LDP and is more supportive of increasing Japan's military posture than the LDP.

⁶⁴. DSP, Compilation of DSP Decisions at the 27th National Convention, 1982, p. 125, as quoted by Umemoto, p. 157.

⁶⁵. DSP Decisions, 27th Convention, p. 126, DSP Decisions, 28th Convention, p. 144, DSP Decisions, 29th Convention, p. 115, as quoted by Umemoto, p. 159.

In summary, of the four leading opposition parties, three have been moving steadily away from abolishing the SDF and the Mutual Security Treaty with the United States, adopting positions less antagonistic to the existence of the SDF and the Mutual Security Treaty. The DSP is the more supportive of a greater role for the MSDF in sea lane defense than the ruling party. The Komeito is only willing to accede the SDF the capability to defend Japan's territory, not sea lane defense, but refuses to increase their capabilities. The JSP wants to cut defense spending and insure civilian control of the Self Defense Forces. It opposes adding the mission of sea lane defense to the SDF. All three want to maintain the institutional constraints in the constitution, the three non-nuclear principles and the principle of non-export of arms.⁶⁶ The JCP wants to abolish the SDF in favor of a autonomous Japanese military. In general, though, the opposition parties positions on the SDF have become more supportive since the late 1970's. Having discussed opposition parties, the role of business will be examined next.

In Japan, business, politics and government are closely interrelated. Edwin O. Reischauer described the relationship this way.

The Japanese have often described the symbiotic relationship between politicians, bureaucrats, and business leaders in terms of Janken, the paper-scissors-stone game of Japanese children. The conservative politicians depend on the money of business; business depends on the administrative rulings of the bureaucracy; and the bureaucracy depends on the political decisions and Diet votes of the politicians.⁶⁷

For the most part decisions are made based on prior consultation between the three groups.

⁶⁶. Umemoto, p. 174.

⁶⁷. Reischauer, Edwin O., The Japanese, Harvard University Press, 1977, p. 292.

Business plays an important role in Japan's Defense industry. Japan has always emphasized domestic production of defense material. In 1969 Japanese manufacturing made 97 percent of its own ammunition and 84 percent of its aircraft, tanks, guns, and ships.⁶⁸ This tendency has continued. It should be noted however, that for most of the munitions producing firms, defense contracts are only a small percentage of their total output. The largest producers of defense related material tend to be the least dependent on defense contracts.

Business in Japan is represented by four principle organizations. The Federation of Economic Organizations or Keidanren is the strongest and most influential, containing only big business and large government cooperations. Small and medium sized firms are represented by Nissho, or the Japan Chamber of Commerce and Industry. The Japan Committee for Economic Development, Keizai Doyukai, founded in 1946, was originally concerned with rebuilding Japan's industry. It supports a progressive capitalist economy, but generally avoids defense issues. The Japan Federation of Employers' Association, the Nikkeiren, was founded to oppose militant labor unions, but now works to promote the interests of both labor and management.⁶⁹

The Keidanren has a special group, the Defense Production Committee (DPC) which oversees the interests of the defense industries. The DPC, funded by the Japanese Munitions Industry Association, is widely supported by leading businessmen.

⁶⁸. Kahn, H., The Emerging Japanese Superstate: Challenge and Response, Prentice-Hall, 1971, p. 163.

⁶⁹. Endicott, J. E. and Heaton, W. R., The Politics of East Asia: China, Japan and Korea, Westview Press, 1978, p. 221.

Japanese business is generally in favor of a stronger defense. Takeshi Sakurada, president of the Nikkeiren, stated, "Japan should produce more defense arms for itself...and spend every penny it can on defense."⁷⁰ The DPC has proposed that the government double its funding of defense research and Nissho and Keidaren recommend that the ban on arms export be relaxed.⁷¹ But the business community's influence on defense policy and programs is modest, and defense production is only a small part of its total output.

Another group that affects government policy in Japan is the news media. The press and television exert political influence, by disseminating facts or selecting which facts to report, and by encouraging the public to adopt certain societal values.

The five big daily newspapers are divided by size of circulation into the "big three," the Asahi, the Mainichi, and the Yomiuri, and the "lessor two," the Nikkei, and the Sankei. All five of these newspapers have similar format. They are the primary vehicles of the Japanese opinion makers, the journalists, academics and prominent personalities.⁷² Of these, the newspapers are the most important since the "big three" blanket Japan twice a day and the country's readership per capita (548 papers published per 1000) far exceeds that of any other industrial society. Television news programs appear to have a very limited impact on the public.⁷³

⁷⁰. Far Eastern Economic Review, 14 March 1980, p. 21.

⁷¹. Dornan, J. E., Jr., "The Changing Security Environment in Northeast Asia," eds. Foster, R.B., Dornan, J.E., Jr., Carpenter, W.M., Strategy and Security in Northeast Asia, Russak, 1979, p. 21.

⁷². Pempel, T.J., Policy and Politics in Japan, Philadelphia: Temple University Press, 1982, p. 22.

⁷³. Nishihara, Masashi, "The Media and the Image of Defense Policy: Japan." in Defense and Consensus: The Domestic Aspects of Western Security. Adelphi Paper No.

The press takes a persistently liberal or "dovish" position and generally opposes government positions on defense issues. For example, during the 1960's, the majority of the press opposed the Japan-United States Security Treaty, questioned the constitutionality of the Self Defense Forces, decried the presence of U.S. nuclear weapons in Japan, and fought against breaking the one percent limit on defense spending. But lately the news media has not represented the majority opinion. For 20 years after 1945, the majority of Japanese were attracted to 'utopian pacifism', but, since about 1965, they have outgrown pacifism much faster than the press and appear to accept the world as it is with a "mixture of cynicism and sophistication." The "Big Three" newspapers have consistently challenged the constitutionality of the SDF, but public support for the SDF has increased over the years, until it is now over eighty percent.⁷⁴

During most of the 1970s the "big three" took an idealistic view. Their editorials slanted toward applying the brakes to military improvements, discounted the external threat, and warned about the danger of being dragged unwillingly into a war because of the MST. They did not advocate breaking the treaty or abolishing the SDF however. On the other hand, the "lessor two," adopted realist inclinations, stressing the "balance of power as the keystone for a nation's security" and "highlighting the importance of military capability to deter aggression." Nikkei and Sankei firmly supported the SDF and the security treaty with the United States. However neither one ever advocated that the "institutional constraints" be exceeded or

182, International Institute for Strategic Studies, New York: St. Martin's Press, 1983, p. 46.

74. Nishihara, "The Media...", p. 49.

abolished. In this they adopted the realist view that the SDF could made strong enough in the existing framework.

Then in the beginning of the 1980s the Yomiuri shifted from the idealist view to a realist view. That is, "it has come to look upon international relations in balance-of-power terms, stress the significance of military deterrence, and in consequence stand behind defense efforts."⁷⁵ This shift may have been the result of changing public opinion, but is more likely a reflection of a perceived change in the international environment, (such as the death of detente) and a growing perception of the threat to Japan.

Some analysts believe that the Japanese news media's influence on defense issues may be overestimated. Masashi Nishihara observes that:

For the past thirty years, some major newspapers have persistently criticized the Liberal Democratic Government for its conventional rearmament programmes, begun in 1954, and pressed their pacifist or 'dovish' views. But that has not prevented the Liberal Democrats from forming the Government for the entire postwar period.⁷⁶

This may be true. It is also true that the LDP has presided over one of the most prosperous periods in Japan's history, and that could be a more significant reason for the LDP's long reign in office.

The Japanese public is very conservative, unconcerned with foreign affairs, and politically very passive. Most do not identify strongly with a political party and avoid politics. Consequently, the Japanese public accepts the status quo for the most part and supports government policy. In view of this, it is not surprising that, public opinion has moved gradually from the idealist to the realist position.

⁷⁵. Umemoto, p. 138.

⁷⁶. Nishihara, p. 45.

That is, most Japanese accept the balance of power theory as the best explanation of the international system, but also believe that the size of the military must be limited.

Certain elite groups in Japan have characteristic political opinions. Journalists, newscasters, and university professors tend to have leftist leanings, especially the educators. These elites are usually outside the decision-making process. They express their ideas in articles, but have little direct impact on policy. Other elites in Japan, bureaucrats, politicians, businessmen, and professional military officers tend to be conservative. They have strong ties to the government and support its policies.

A shift of a different sort is noticeable in the official statements of the Japan Defense Agency (JDA). Before examining the JDA's positions on sea lane defense, it must be noted that the JDA does not have the same influence on defense policies as the military departments of most nations. The Director General of the JDA is not a cabinet member and the JDA as an agency has a lower standing than the government ministries such as the Foreign Ministry, the Finance Ministry, and the Ministry of International Trade and Industry. The JDA is directed by civilians, and thus has a less military character than defense departments of other countries. This is clearly evident in the JDA's policy statements, which until the late 1970's stressed diplomacy as the key to national security. Recently the JDA has placed more emphasis on analyzing the military threat and developing the appropriate force levels, including the possibility of more far-ranging missions for the MSDF, such as sea lane defense.

In 1970 the JDA published the first an annual Defense White Paper. For the first few editions Soviet activity around Japan was depicted in charts and graphs, but labeled "unidentified" to avoid antagonizing the Soviet Union. No country was pointed out as a threat to Japan.

By the mid-1970's, while still naming no threat to Japan, the JDA's White Papers warned that although a Japanese military buildup would raise concern among Japan's neighbors, a "power vacuum" would also be destabilizing. The White Papers of 1977-78 stated that the Japan-U.S. security treaty made "...full scale armed aggression against Japan...hardly conceivable. But limited aggression may be considered a possibility."⁷⁷ Diplomacy remained Japan's primary defensive action.

In 1978, the JDA's White Paper noted that the United States no longer had military superiority over the USSR in all areas. To gain support for SDF improvements, the JDA pointed out the role of the military in "comprehensive security" and that if deterrence should fail, military power "becomes the most important means to protect the country's independence."⁷⁸

The JDA watched buildup of Soviet Pacific Fleet in the 1970's, marked by an increase in naval units, the addition of an aircraft carrier, and deployment of Backfire bombers to the Far East, with concern. The JDA's 1979 White Paper observed:

The Soviet Union is now strong enough to compete with the U.S. in nuclear war capability in general as well as in conventional war capability in Europe and the Far East...the Soviet Union is making it difficult for the

⁷⁷. Defense of Japan 1977, p. 23.

⁷⁸. Defense of Japan 1978, p. 20.

U.S. to insure the safety of air and sea lines of communication...⁷⁹

The Soviet Union was referred to as an "increased potential threat." But the JDA did not propose an increase of the targeted NDPO force levels. Noting that previous acquisition programs had failed to achieve these goals, the White Paper urged they should be "reached as soon as possible."⁸⁰

The Soviet Union was still a "potential" threat to Japan in following White Papers. And the military situation continued to be analyzed in terms of the Soviet-U.S. balance, as though Japan were only an observer.

As the relative power of the U.S. in Asia declined, the JDA began to proclaim a need for greater SDF capabilities, although always within the context of the U.S.-Japan security arrangement. In the 1982 Defense White Paper, the JDA observed that "military power is indispensable for national security and also forms part of the framework of the international order."⁸¹ While the JDA defended the necessity of military power, it also recognized the role of the U.S.-Japan security treaty. The JDA maintained that Japanese defense rested on three pillars: a strong public will for independence, effective development of defense capabilities, and the U.S.-Japan security treaty.

In 1982, Director General Ito of the JDA, summarized the views of the JDA on defense.⁸²

⁷⁹. Defense of Japan 1979, p. 28.

⁸⁰. Defense of Japan 1979, p. 34.

⁸¹. Defense of Japan 1982, p. 54.

⁸². Ito, Soichiro, "The International Situation and Japan's Defense," Asia Pacific Community, Summer 1982, p. 3-10.

1. Japan must be responsible for protecting itself but "minimal" self-defense should not be exceeded.
2. The Soviet military buildup was mainly a reaction to China and the other Pacific nations.
3. The restrictions of the Constitution and the three non-nuclear principles should be upheld.
4. Japan's defense capability is insufficient, but it is growing steadily.
5. Japan should assume more of its defense burden (within constitutional constraints).
6. It is doubtful that current defense goals can be reached with less than 1% of GNP going to defense each year.
7. The 1976 NDPO should not be revised. Instead, goals listed should be achieved in a timely manner.

The JDA desired an increased defense budget, citing the difficulties of attaining the NDPO goals within the one percent limit, but did not call for increasing force levels above the NDPO levels. Instead the JDA proposed to build up the SDF by improving and modernizing existing forces.

In the official statements of the JDA, there is a steady gradual shift towards identifying a definite threat and desiring a more capable defensive force. But the JDA is not the most vocal proponent of larger forces and an increased role for the SDF. The JDA recognizes that its existence is still challenged by a substantial minority of the Japanese and is careful not to overstep its accepted limits. Whatever the JDA officials say in private, they are careful to maintain a correct public image. For example, Japanese Defense Agency is still careful to make a distinction between the capability to attack and the intention to do so. For this reason the Defense of Japan 1986 states that: "The Soviet Union deploys powerful military forces in the area around Japan....[This] increases the latent threat to Japan.[author's emphasis]." ⁸³

There is no consensus over the appropriate military strategy among the three Self Defense Forces either.

⁸³. Defense of Japan 1986, p. 24.

Each proposes a strategy that supports its claim on the defense budget. This is not surprising. But before considering the current interservice debate, an examination of the historical background of the debate over the role of Japan's maritime forces will illustrate its unchanging character.

The debate over the role that naval forces should play in the future defense of Japan began immediately after the conclusion of World War II during the American Occupation. As James E. Auer substantiates in his book The Postwar Rearmament of Japanese Maritime Forces, 1945-71, some form of Japanese naval force has existed continuously since the end of the war. Auer says:

Naval activities by the Japanese took place throughout the Occupation; a uniformed, organized naval force, first a remnant body, but later an entirely new organization, which testifies to its military character by deploying into combat, existed prior to the Korean War; and that the events of Korea, rather than triggering the first steps of rearmament, at least as far as a Japanese navy is concerned, merely demonstrated to Occupation and to Japanese authorities that a strengthened, more professional navy was necessary.⁸⁴

Thus in reality the debate was not over whether or not Japan should have naval forces, but over their form and role.

The postwar development of Japan's maritime forces was directed by pressing needs. The immediate problem after the Japanese surrender was clearing mines. Consequently the Japanese Navy was directed by U.S. forces to commence minesweeping. These units were later put under the command of the U.S. Fifth Fleet and finally under the Commander of U.S. Naval Forces Japan.

Postwar smuggling and illegal entry into Japan from Korea, created a problem. To meet this need, on August 28, 1947, two months after the promulgation of the

⁸⁴. Auer, p. 37.

postwar constitution of Japan banning sea forces, twenty-eight former vessels of the Imperial Japanese Navy were transferred to the Japanese Ministry of Transportation by SCAP (Supreme Commander Allied Forces Pacific) for coastal patrol purposes.

This force's size and missions were undefined, leading to calls from some officials of SCAP, some members of the Allied Council for Japan, and the Far Eastern Commission, for definite limitations on the organization. Therefore in April 1948, (two years before the outbreak of the Korean War and General MacArthur's call for creating the National Police Reserve) the Maritime Safety Board Law established the Maritime Safety Agency, as an official coast guard. It could not have more than 10,000 personnel or 125 ships. Although the MSA's mission was vague, its immediate duties were clear--minesweeping and coastal patrol.

Operating as a uniformed naval force when the Korean War began, Japanese minesweepers were deployed to Korea and used extensively in support of U.N. forces. Their professional efforts in support of the Wonsan landing are well known.

In July of 1952, the National Safety Agency Law established the National Safety Agency redesignating the National Police Reserve as the National Safety Force, and the Maritime Safety Force as the Coastal Guard Force. No new missions were assigned to Coastal Guard Force, but it did not matter because there were so few ships. The first frigates and landing craft received from the U.S. were used for training and the minesweepers kept sweeping.⁸⁵

In June 1954 the National Safety Agency Law of 1952 was completely amended to create three separate Self Defense Forces: the Ground Self Defense Force (GSDF),

⁸⁵. Auer, p. 128.

the Air Self Defense Force (ASDF), and the Maritime Self Defense Force (MSDF). For the first three years no explicit duties were spelled out in public policy. The JMSDF forces simply trained and swept mines.

The formation of the National Defense Council in 1956 and its document defining national security, the "Basic National Defense Policy," sparked an intense debate over the role of the MSDF that has continued along the same lines to the present. The debate is over four questions. Is there a difference between offensive and defensive war at sea? Can a navy adopt a "purely defensive" strategy? What is the role of a navy? Should Japan have an ocean-going navy or a limited coastal defense force? Until this debate is resolved, Japan will not have a maritime strategy.⁸⁶

The civilian defense planners at the JDA tend to hold that there is a difference between offensive and defensive sea warfare; and that the MSDF should be oriented toward preventing invasion, infiltration, sabotage, and mining. They envision the MSDF as a coastal defense force.

The leaders of the MSDF question the difference the planners make between offensive and defensive warfare at sea. They argue that to defend Japan against "direct and indirect" attack it is necessary to protect the sea lanes. They feel that because Japan is a maritime nation, an ocean-going navy is required.⁸⁷

Auer illustrates the nature of this debate by outlining the "visions" of two representative proponents. A brief description of their positions will be examined because the debate is the same today as it was then. Kaihara Osamu, a former head of the Defense Bureau, maintains the "minimalist" view, while

⁸⁶. Auer, p. 133.

⁸⁷. Auer, p. 133.

Sekino Hideo, a retired commander in the Imperial Japanese Navy represents the "expansive" view.

Kaihara points to the defeat of Japan's merchant shipping in World War II as proof that merchant fleets can not be defended. A small island nation like Japan can not overcome the twin damaging characteristics of its geography and lack of resources: There is no room to retreat and regroup, and Japan will always be vulnerable to blockade. The overpowering strength of the Soviet Union makes any defense of sea lanes ludicrous. Protecting the sea lanes is unauthorized by the constitution, unrealistic because of the vast areas that must be defended and the tactical advantages of the submarine, and impossible because Soviet submarines greatly outnumber Japan's escort forces. The only authorized, realistic, and sensible role for the MSDF is that of a coastal defense force. Defense of the sea lanes should be left to the United States in exchange for use of Japanese bases.⁸⁸

Sekino disagrees. Japan's geostrategic location and lack of resources require a strong navy. Sekino holds that securing the sea lanes is difficult, but not impossible. Furthermore, in the event of a direct invasion of Japan, Sekino argues that the United States has an obligation to defend Japan, and will do so. But the U.S. has no obligation to defend Japanese shipping, and against a sea lane interdiction campaign, Japan may have to stand alone.

To accomplish this, in wartime Sekino would reduce the amount of shipping to half the normal peacetime level and limit the areas where it sailed. A "Maritime Safety Zone" would be established south of Japan and defended by fixed sonar stations on islands and hunter-killer groups of destroyers, aircraft, and submarines.

⁸⁸. Auer, pp. 134-139.

Shipping of high value or in certain high risk areas, would be protected by convoys. Air defense would be provided by basing VTOL fighters on islands and improving the air defense over Japan. Soviet submarines would be destroyed as they attempted to pass through the three straits to exit the Sea of Japan. In the event of an invasion, the same forces that protect the sea lanes would intercept the invading force and destroy them at sea.⁸⁹

The Japanese government has never decided in which direction the MSDF should develop, resulting in a "non-policy." As Auer says:

The government has remained content to allow civilian defense planners to put forth their views on a limited, effective anti-invasion security force; but it has also allowed the MSDF leadership supported by conservative politicians and business elements to build some long lead-time naval vessels which could be used for a future ocean-going navy able to protect Japan's interests in local and more distant waters. It has most of all allowed the Finance Ministry to keep defense expenditures very low...⁹⁰

The lack of a strategy makes it difficult to achieve a capability for sustained operations, since under the present "civil-planner, uniformed leader, finance-official limited-say, participatory Ringi or torimatome system, a consensus is achieved bureaucratically."⁹¹

Auer's comments are as appropriate today as when they were written. The debate over the nature of the MSDF still goes on. It is interesting to note, that of the approximately sixty major vessels in the MSDF, half are organized into escort squadrons without territorial obligations and half are assigned to regional districts. The NDPO describes the missions for the latter group as "units assigned to coastal surveillance

⁸⁹. Auer, pp. 139-142.

⁹⁰. Auer, p. 145.

⁹¹. Auer, p. 146.

and defense, surface anti-submarine capability of at least one ship division...in each assigned sea district" (coastal patrol?).⁹² This indicates that there is still no consensus on the employment of the MSDF. (These MSDF ships are in addition to the ships of the Maritime Safety Agency which are completely independent.) In comparison, the U.S. Navy, with its "forward defense" strategy is completely organized in squadrons, built around a deploying battlegroup.

Unfortunately, in addition to the debate about the form of the MSDF between the JDA and the MSDF, there is considerable interservice rivalry among the three services. Naturally each service seeks to protect its share of the defense budget and promotes appropriate defense strategies to accomplish that end.

The Ground Self Defense Force (GSDF) considers invasion to be the most serious and likely threat facing Japan. Due to the proximity between Hokkaido and the Soviet held territory around it, and the strategic value of controlling the Soya strait, the GSDF concentrates its forces in the defense of Hokkaido. Yoshihisa Nakamura, a Lt. Colonel in the GSDF and a professor of military strategy at the Japanese National Defense University (Boei Daigaku), has analyzed the interservice rivalry in Japan. He says the GSDF feels a limited Soviet invasion to secure the use of the Soya strait is the most likely threat. The GSDF deploys about two thirds of its tank forces on Hokkaido to deter such an attack. In the event deterrence fails, the GSDF proposes to resist the invasion and to protect the airfields on Hokkaido. To accomplish this the GSDF favors three policies: building more tanks, expanding the reserve ground

⁹². As quoted in Defense of Japan 1986, p. 259.

forces to 300,000, and increasing the air defense of Hokkaido.⁹³

Whereas the GSDF believes the greatest threat is to the north, Professor Nakamura says the MSDF looks to the south. The MSDF argues that Japan is highly dependent on oil imports and that the Soviets are more likely to interdict Japan's sea lanes than to invade Hokkaido. To defend this argument, the MSDF points out that the Soviet Pacific Fleet has few amphibious assault ships. Professor Nakamura alleges that the MSDF wants to control the straits with surface ships and submarines rather than with less expensive mines, as this strategy supports a larger fleet.

According to Professor Nakamura, the ASDF is ambiguous over the missions of defending Hokkaido and the sea lanes. The ASDF's highest priority is to defend the island of Honshu, and it assumes the U.S. Air Force will take the offensive against the Soviets. The ASDF does not have tanker aircraft and so can not protect the sea lanes any great distance from Japan. The ASDF wants more emphasis on early warning, including airborne warning and control system (AWACS) aircraft, and over-the-horizon radars, and tanker aircraft.

This interservice rivalry is an impediment to the development of a national defense strategy. To be implemented, a sea lane defense plan must contain a role for each of the services.

Each strategic school of thought and group of elites in Japanese society has its own particular view of the international environment and what is in the best interests of Japan. An examination of all these opinions over the last ten years reveals a widespread

⁹³. Nakamura, Yoshihisa, lecture on "Japanese Service Strategies" given at the Naval Postgraduate School, Monterey, Ca. on 24 August 1987.

tendency to become more accepting of the legitimacy of the defense forces of Japan, and a growing feeling that Japan may be threatened in the future and should do more to defend itself. For some groups, this means a recognition of the importance of the sea lanes and support for the MSDF to assume a larger role in defending them. Whether this was caused by government action, changes in the balance of power, or the Japanese people's perception of themselves as a nation is not important to the question of sea lane defense. What is significant is that there appears to be grounds for the formation of a new consensus on defense: one that includes a greater role for the SDF in the defense of Japan's sea lanes.

IV. THE JAPANESE SEARCH FOR STRATEGY IN SEA LANE DEFENSE

The last chapter found that the role of sea lanes in Japanese Defense policy is receiving more attention, the government appears to be attempting to create a new consensus on defense, and that members of Japanese society have conflicting perceptions on defense and the proper role of sea lanes. This chapter examines the government's present position on sea lane defense, current Japanese military capabilities, assistance that Japan may receive from her neighbors, and assesses current Japanese strategy.

A. THE GOVERNMENT POSITION ON SEA LANES

Nakasone's term as Prime Minister enlivened the Japanese debate over sea lane defense and revived western hopes of a greater Japanese contribution to defense. A 1987 commentary illustrates the feelings of Japan's allies.

Mr. Nakasone deserves credit for pushing his country's defence policy above that famous spending ceiling of 1% of GNP and towards adequately doing the things Japan can to contribute to the free world's defence: protecting its own territory and the sea lanes around the Japanese archipelago, and providing American with intelligence about Russian's Pacific fleet. The gentle rise in defence spending should continue until Japan can carry out those tasks."⁹⁴

Nakasone expanded on his predecessor's acknowledgement that Japan could protect its sea lanes out to 1000 miles. In January 1983, Prime Minister Nakasone declared that, in his view, Japan should prevent Soviet Backfire bombers from penetrating into the Pacific, control the straits surrounding Japan, and

⁹⁴. The Economist, "Who Will Lead Japan?" 22 August 1987, p. 13.

"secure and maintain the sea lines of communication" to Japan.⁹⁵ Nakasone also expressed enthusiasm for mining the straits in an emergency, to bottle up the Soviet Pacific Fleet in the Sea of Japan.

Prime Minister Nakasone seemed eager for Japan to assume greater responsibilities for defense, but his feelings were not always representative of the official government position. For example, in response to U.S. requests that the Japanese provide minesweepers or financial support in the Persian Gulf, Nakasone told the Diet on 22 August 1987 that dispatching a minesweeper force to the Gulf is "legally possible."⁹⁶ However, Yoshifumi Matsuda, the Foreign Ministry's chief spokesman, later said that Japan could not send ships or military personal to the Gulf. "The government's 'legal position,' he said, is that minesweeping by Japanese forces in international waters is not barred, but that the interpretation is based on protecting sea lanes around Japan."⁹⁷

Nakasone's efforts to break the one percent limit on defense spending, though ultimately successful, were resisted by public opinion and some of his own LDP members.

The 1976 cabinet decision to limit military expenditures to one percent of GNP proved to be a formidable obstacle. Although the limit will be broken this year, it won't be by much. Spending in fiscal year 1987 is estimated at 1.004 percent of GNP.⁹⁸

⁹⁵. Tokinoya, Atsushi, "The Japan-U.S. Alliance: A Japanese Perspective," Adelphi Paper 212, London: International Institute for Strategic Studies, 1986, p. 5.

⁹⁶. Butts, David, "Japan should help protect Gulf," United Press International, 14 September 1987.

⁹⁷. Schweisberg, David R., "Japan Studying Aid to U.S. in Gulf," United Press International, 10 September 1987.

⁹⁸. Shapiro, Margaret, "Japanese Agency Asks Immediate Defense Buildup," The Washington Post, 29 August 1987, p. A20.

Even with the one percent limitation, Japan's defense budget is large, ranking ninth in the world in 1984.

Significantly, Prime Minister Nakasone's attempt to explicitly abandon the limit in 1985, was decisively defeated within the LDP. Yet the defense budget was increased almost 7 percent in 1985, a year when most other budgets remained unchanged. However, the increase will not be enough to reach the goals of the Mid-Term Defense Program Estimate. As of May 1984, 27 percent of the 1983-87 targets, based on the 1976 National Defense Program Outline, had been attained, when 40 percent attainment had been projected. In the recent period of slowing economic growth, the government's efforts to increase the defense budget have had to be reconsidered in light of falling revenues and growing budget deficits. "The government's new policy is to hold down defense spending to 18.4 trillion yen for the five-year fiscal 1986-90 period in terms of fiscal 1985 costs."⁹⁹ U.S. officials have been calling for Japan to develop the capabilities to defend its sea lanes by 1990, but, if the Japanese defense budget is limited to "about" one percent of GNP, that deadline is unrealistic.¹⁰⁰

With strong support from Nakasone, the Japanese Defense Agency was able to increase the defense spending for fiscal year 1986 by 6.58 percent to US \$16.5 billion. More significantly, in an effort to overcome the shortcomings of the Mid-Term Defense Program Estimate in meeting the goals of the 1976 outline, and to upgrade the Defense Agency level document to cabinet level, on September 19, 1985, the government decided to reinstate the cabinet-level

⁹⁹. Kyodo News Service, "Gist of Defense White Paper," 28 August 1987.

¹⁰⁰. Akaha, p. 274.

defense buildup plan approach. This elevated the build up plan from the status of an agency plan, to having the official approval of the cabinet. Under the new five-year plan (1986-90), the SDF would meet the goals of the 1976 outline. Even with that force structure, however, the Japanese SDF would still not have enough assets to be able to adequately defend its sea lanes.

The new five-year defense build-up plan, calls for the procurement of 50 additional P-3C anti-submarine aircraft, 63 F-15 fighter planes, 9 new escort vessels, and 5 E-2C patrol planes, to replace existing obsolete equipment. In weapons procurement and development, the MSDF is placing an emphasis on anti-submarine warfare (ASW) weapons systems, including putting the AN/SQR-18A tactical towed-array-sonar on helicopter carrying destroyers, licensed production in Japan of the P-3C Update II ASW patrol plane and the Mk-46 Mod 5 ASW torpedo, and procurement of two SH-60B airframes in preparation for producing the helicopter in Japan. In advanced anti-submarine warfare technology, the MSDF is critically dependent on the U.S. While some officials in Japan view this dependency as necessary in order to standardize weapons system and enhance interoperability, critics claim that such dependency will inevitably lead to Japan's increasing vulnerability to political whims in the United States.¹⁰¹

The emphasis on air defense capabilities and anti-submarine warfare indicates the intention to defend Japan's sea lanes. Recent government statements seem to bear this out. A Japan Defense Agency spokesman stated:

Japan will introduce a sophisticated radar system and warships armed with new ship-to-air missiles in its new military program to defend

¹⁰¹. Akaha, p. 275.

ocean shipping lanes, a Japanese defense agency official said today.¹⁰²

Prime Minister Yasuhiro Nakasone stated that "the maintenance of ocean shipping safety is a matter of life and death."¹⁰³ Seiki Nishihiro, the director of the defense bureau of the defense agency, explained that the program to protect Japan's sea lanes will be implemented in three stages.

The first stage will set up facilities for early detection and monitoring of invaders. The second will be a system of patrolling fighter aircraft to eliminate threats to shipping. The third stage of the plan will be to protect Japanese ships from attacks.¹⁰⁴

The latest defense White Paper defended the JDA against charges of renewed militarism, reaffirming civilian control over the military and blaming the Soviet military build up for an increased "latent threat" to Japan. It notes that Japan's geographical location hinders the Soviet Union's route of advance into the Pacific, the sharp increase in military cooperation between the Soviets and North Korea, and the construction of a large-scale phased array radar network encircling the entire Soviet Union.¹⁰⁵

The Defense of Japan 1986 contains the Japan Defense Agency's new view of the threat. The Soviet Union is able to confront the United States on both the nuclear and conventional level. A quarter to one third of Soviet military forces are deployed near Japan. The Soviets have deployed the new type TU-95 Bear-H bombers, capable of carrying AS-15 long-range cruise

¹⁰². Kyoto News Service, "Japan Introduces Three-stage Plan to Defend Shipping Lanes," 17 July 1987, as translated by Foreign Broadcast Information Service (FBIS).

¹⁰³. Kyoto News Service, "Japan Introduces Three-stage Plan to Defend Shipping Lanes," 17 July 1987.

¹⁰⁴. Kyoto News Service, "Japan Introduces Three-stage Plan to Defend Shipping Lanes," 17 July 1987.

¹⁰⁵. Shapiro, Margaret, p. A20. See also Christian Science Monitor, 11 Sep 87.

missiles equipped with nuclear warheads in the Soviet Far East, along with some 170 SS-20 intermediate range nuclear missiles and about 85 TU-22M Backfire bombers. The SS-20 missiles, each carrying three nuclear warheads, are capable of reaching Japan within ten minutes of launching. The Backfires, deployed east of Lake Baikal and on the shore opposite Sakhalin, have a range of 4000 km, carry the AS-4 air-to-surface missile, and thus can strike the sea lanes around Japan. About 390,000 troops, or 43 divisions, out of the entire Soviet ground force strength of two million, or 211 divisions, are deployed in the Soviet Far East, roughly east of Lake Baikal. About 840 ships, including 75 nuclear powered submarines, out of the Soviet Navy's total of about 2,980 ships, are stationed in the Soviet Pacific Fleet. The Soviet Air Force has about 8,840 combat aircraft, of which about a quarter, or 2,390, are deployed in the Far East. These include about 460 bombers suspected of conducting "attack training" exercises against Japanese Air Self Defense Force radar sites. The Soviet Union also appears to be building a new type over-the-horizon radar to detect aircraft in the Pacific.¹⁰⁶

As for sea lane defense operations, the Defense of Japan 1986, notes Japan's dependence on the sea lanes, and states that enemy submarines, aircraft, or surface ships may attack vessels on the sea, or lay mines. To counter this:

The SDF will carry out various operations such as patrol, escort, air defense and protection of ports and straits to check for or diminish the enemy forces and prevent the enemy's effective operations and, with the cumulative effects of these operations, the SDF will

¹⁰⁶ Kyodo News Service, "Gist of Defense White Paper," 28 August 1987.

ensure the safety of maritime transportation.¹⁰⁷

Defense of sea lanes out to 1000 miles is not mentioned specifically. The routes or destinations of the sea lanes, or plans to convoy merchant vessel, are not discussed either, indicating that there is still a lack of official consensus on sea lane defense.

While some officials of the Japanese government have called for an expanded Japanese role in sea lane defense, including commitments made to the United States by two Prime Ministers, there are other officials who oppose such a role. This inability to form a consensus prevents the formation of a definite policy regarding sea lane defense. However it appears that the proponents of an expanded Japanese role in sea lane defense have grown more influential in the government. While it is not clear yet what view the new Prime Minister, Noboru Takeshita, will take, judging from the government's past behavior, a radical change in Japan's security posture should not be expected. A continuation of the gradual build up of military capabilities is more likely. Japan's present capabilities for sea lane defense will be examined next.

B. JAPANESE CAPABILITIES FOR SEA LANE DEFENSE

Most American military analysts, eager for Japan to build up its military capabilities, feel the Self Defense Forces do not compare in size or offensive capabilities to most modern military organizations. Other analysts feel Japan has considerable military power. For example, Malcolm McIntosh writes:

With fifteen submarines, the Japanese rank eighth in the world; with fifty-four combat surface vessels they come fifth in NATO

¹⁰⁷. Defense of Japan, 1986, The Japan Times, Ltd., 1986, p. 95.

ranking; ...with 800 aircraft (including over 300 combat aircraft) they rank fifteenth in the world....They also have developed sophisticated missiles and, reputedly, the world's best anti-submarine sonars. Overall some experts rank the Japanese forces as the sixth largest in the non-Communist world.¹⁰⁸

The truth is somewhere in between. Japan is not a major military power, but its forces, though weak in particular capabilities, have considerable means of defending its sea lanes.

To protect its sea lanes out to 1000 miles Japan must accomplish three missions: control of the air over Japan and the sea lanes to the south, the ability to move merchant vessels safely through the sea to the southern ports of Japan, and control of the three straits into the Sea of Japan. An accurate analysis of Japan's capabilities to accomplish these mission is required to determine an appropriate strategy for sea lane defense.

For air defense the ASDF operates about 311 combat aircraft organized into 6 combat air wings and one combat air group. Japan has 11 fighter-interceptor squadrons. Four squadrons are comprised of 83 Mitsubishi/McDonnell-Douglas F-15J/DJs. (The "J" designation signifies that they were produced in Japan and contain some modifications.) Six contain 110 Mitsubishi/McDonnell-Douglas F-4/EJs, and the remaining squadron is composed of 30 Mitsubishi/Lockheed F-104J's. The main armament for these aircraft is the U.S. sparrow or sidewinder air-to-air missile (AAM). For reconnaissance and electronic warfare, the ASDF has one squadron of 10 RF-4EJ and one wing with 6 Grumman E-2C. For ground support, it has 50 Mitsubishi F-1's in three squadrons, and 20 Kawasaki C-1's, 10 NAMC YS-11's and 4 C-130H's for transport. Nineteen squadrons of Nike-J surface-to-air missile (SAM) units, totalling

¹⁰⁸. McIntosh, p. 144-47.

180 launchers defend the ASDF's facilities. The Nike-J SAM's are being replaced by the more capable Patriot system.¹⁰⁹

The ASDF's ability to defend the air space over Japan and the surrounding oceans is constrained by its proximity to Soviet bases and a deficient early warning system. It needs more radar sites and capable airborne early warning systems. Additional radar sites and bases on the islands to the south of Japan are required to extend air protection over the sea lanes. Moreover, the ASDF does not have any airborne tankers, which severely limits the combat range of their interceptors. Finally, given the numbers of Soviet aircraft, it is unlikely that the ASDF could adequately defend the huge additional ocean area without more interceptors.

For sea control, the Japanese Maritime Self Defense's (MSDF) main force consists of 34 destroyers and 18 frigates, for a total of 52 open ocean escorts. Of these, 28 are organized into four ASW groups and the rest are assigned to regional districts. The newer anti-submarine (ASW) ships are modern, capable and efficient. But the force as a whole is limited in anti-air warfare (AAW) and anti-ship missile defense (ASMD). Only five have more than a short range (25 km) anti-air warfare (AAW) capability. 27 have either the phalanx close-in-weapon-system (CIWS) or sea sparrow, or both. The other 25 have no air defense other than guns. The JMSDF does not operate an aircraft carrier, so it must rely on shipboard anti-air missile systems and land based air support for protection against attacking aircraft. This is a serious weakness because in war the JMSDF will be operating within range of

¹⁰⁹. All figures on aircraft and air defense are from The Military Balance 1986-87, International Institute for Strategic Studies, 1986. Defense of Japan 1986 lists similar, although in some cases, slightly smaller figures. The later figures from The Military Balance were used.

land-based Soviet aircraft. The JMSDF force of 52 combatants is simply not large enough to carry out the missions of defending the waters around Japan, blockading the straits, conducting anti-submarine patrols, and protecting the sea lanes out to 1000 miles.¹¹⁰

The JMSDF surface force is critically weak in other areas also. Only 22 ships are armed with the Harpoon surface-to-surface missile and some ships still carry the obsolete Mk 44 torpedo as their primary ASW weapon. There are only two underway replenishment vessels, and no more are planned, restricting the surface fleet's operating areas and ability to stay on station.

The JMSDF has the world's fourth largest mine sweeping force, and one of the most modern. This first rate force of 42 vessels includes one command ship, two support ships, six tenders, and a squadron of minesweeping helos (7 total). Minesweeping is a time consuming operation, however, and with Japan's extensive coastline, 42 vessels could not keep all the coastal areas and port approaches open against a concerted minelaying operation. The force would be adequate to keep at least some of the principle ports open, depending on the intensity of the minelaying program. The MSDF also maintains one minelaying ship and 16 patrol boats.¹¹¹

In its land-based air ASW assets the JMSDF has made the most impressive gains recently. It currently operates 26 P-3Cs (Lockheed), 74 P-2J (Lockheed), and 13 PS-1 (Shin Meiwa), which gives the JMSDF a credible ASW patrol capability.¹¹²

¹¹⁰. Figures from Jane's Fighting Ships 1987-88, Jane's Ltd, 1987, p. 302.

¹¹¹. Jane's Fighting Ships 1987-88, p. 302.

¹¹². The Military Balance 1986-87, p. 158.

The Japanese Maritime Safety Agency (MSA), a coast guard force completely separate from the MSDF, operates approximately 221 coastal patrol and rescue vessels, including 44 large and 47 medium boats. While seven of the large craft carry the Bell 216 search and rescue helicopter, the lack of sonar systems and ASW weapons render the MSA unsuitable for more than an extremely limited role in sea lane defense.¹¹³

The JMSDF operates a fleet of 15 diesel electric submarines which are ideally suited for operations in the waters surrounding Japan. The Yushio class is considered one of the world's most advanced conventional submarines noted for sophisticated sonar.¹¹⁴ These submarines could be used very effectively to defend the three straits keeping the Soviet Pacific Fleet bottled up in the Sea of Japan. Table III summarizes the JMSDF's forces.

The Japanese government is improving the capabilities of the MSDF. In addition, for the past several years, exercises to improve the interoperability between Japanese and American forces have been allowed. As an example, in 1986, Japanese submarines participated for the first time in the international RIM-PAC exercise off Hawaii.¹¹⁵

To aid in the defense of the Soya strait, the JDA plans to deploy an indigenous surface-to-surface missile, a modification of the ASM-1, with a range of approximately 55 miles on Hokkaido.¹¹⁶ In addition, --

¹¹³. Jane's Fighting Ships, p. 322.

¹¹⁴. Young, P. Lewis, "Submarines and Light Forces," Asian Defence Journal, December 1985, p. 59.

¹¹⁵. Jones, P. D., Lt. RAN, J. V. P. Goldrick, Lt. RAN, "Far Eastern Navies," USNI Proceedings, Vol 113, No. 3, March 1987, p. 65.

¹¹⁶. Young, P. Lewis, "Submarines and Light Forces," p. 63.

TABLE III: JAPAN'S NAVAL CAPABILITY

Naval Bases: Yokosuka, Kure, Sasebo, Maizuru, Ominato
Naval Air Bases: Atsugi, Hachinohe, Iwakuni, Kanoya,
Komatsujima, Naha, Ozuki, Ominato,
Oomura, Shimofusa, Tateyama, Tokushima
Personnel: 45,551 plus 4,146 civilians

FLEET

15 Submarines
34 Destroyers
18 Frigates
14 Coastal Patrol craft
42 Mine Countermeasure Vessels
2 Fleet oiler
8 Small Amphibious ships

NAVAL AIR

Marine Reconnaissance/ASW
3 squadrons with 26 Lockheed P-3C
4 squadrons with 55 Lockheed P-2J
1 squadron with 13 Shin Meiwa PS-1

ASW: 6 Hel squadrons with 56 HSS-2/2A/B (Sea King)

Mine Countermeasures (MCM)
1 hel sqn with 7 Kawasaki-Vertol 107

Electronic Countermeasures (ECM)
1 squadron with 4 Kawasaki-Lockheed UP-2J

On Order: 3 submarines, 9 destroyers, 2 frigates, 4 minesweepers, 10 P-3C.

Source: Jane's Fighting Ships 1987-88, 1987.

the GSDF stations two thirds of its tanks and a large percentage of its ground forces on Hokkaido.

But the Japanese government needs to consider some additional improvements that are relatively easy to implement and would greatly increase the effectiveness of the SDF. For example, mining could contribute immensely to controlling the three straits into the Sea of Japan. Mines are inexpensive, long-lasting, and deny use of the sea to an enemy without risking men and material once they are in place. Unfortunately the MSDF does not have the number of mines and delivery platforms required to mine the three straits. But this would be well worth the effort and would not be difficult.

The Tsugaru strait is only 20 km wide between cape Shirakami in Hokkaido and Ryuhizaki in Aomori. No where is the depth greater than 200 meters. This strait could be blockaded with 1000 to 1500 magnetic, acoustic, or pressure mines. The Soya strait is 50 km wide and 100 meters deep. 1000 to 1500 bottom mines would be sufficient to block this strait.¹¹⁷

The Tsushima strait is both wider and deeper. Between Tsushima and Iki is 50 km with the deepest part at 200 meters. But from Tsushima island to Korea is about 60 km with a water depth of up to 500 meters. For the deep water U.S. Captor mines would have to be used. At least 2000 to 3000 mines would be needed to seal this strait. Thus a total of up to 6000 mines of various kinds would be needed to mine all three straits. It is estimated that the MSDF only has 1200 mines in stock.

The MSDF only has one minelayer. It can carry 226 mines. Other ships could carry up to 60. A P-3C can be modified to carry 16 mines and C-130's can carry 37. With such limited delivery platforms it would be difficult for the MSDF to mine the straits in the face of likely Soviet opposition.

Another significant weakness that should be within the capability of the JDA to correct is the lack of a joint war plan and a common communication system for the three services. At present, coordination in an emergency or on joint exercises is extremely difficult. For example, without communications, how could the ASDF provide air cover for ships at sea? The JDA appears to be aware of this problem and may be in the process of solving it. The Japanese Self-Defense Forces held the

¹¹⁷. Information on mining the three straits is from K. Kamiya, "Our Self-Defense Fleet and Soviet Pacific Fleet in Emergency," Kasu, Vol. 1, 1985, pp. 130-135, trans. by NISC.

first unified maneuvers with all three services in September 1986, and began to integrate their communications system at the same time.¹¹⁸

Another problem degrading the SDF's combat capability was a restriction on using satellite communications, which was only removed in 1985.¹¹⁹

In summary then, the Japanese Self Defense Forces are technologically advanced with considerable capabilities for anti-submarine warfare and minesweeping. The SDF are weak in air defense over the sea, organic air defense of their surface forces, and minelaying. Some of these weaknesses may be minimized with the assistance of neighboring nations. Their role in defending Japan's sea lanes will be discussed next.

C. JAPANESE FRIENDS AND ALLIES

As part of its strategy of comprehensive security, Japan tries to maintain friendly relations with its neighbors. In peacetime this maximizes Japan's opportunities for trade. In war, these ties could provide the basis for receiving aid in defending Japan's sea lanes. If the Soviet Union should attack Japan's sea lanes, South Korea, Taiwan, the Philippines, and China, because of their fear of Soviet expansion, would probably help Japan. These four nations are near the heavily traveled Southeast Asian shipping lanes, and may contribute to defending Japan's sea lanes.

The South Korean Navy has nine ex-U.S. destroyers, 6 frigates, 5 corvettes, one submarine, one minesweeper, and 136 patrol craft. Seven of its larger

¹¹⁸. Young, P. Lewis, "Japan's Maritime Self Defence Force," Navy International, Vol 92, No. 3, March 1987, p. 162.

¹¹⁹. Young, P. Lewis, "Japan's Maritime Self Defence Force," p. 162.

vessels are equipped with the harpoon missile giving the South Korean Navy a respectable surface-to-surface attack capability. Unfortunately most of its ASW equipment is obsolete and therefore ineffective for ASW patrol or convoy defense.¹²⁰

However, South Korea's position is tactically significant for two reasons. Soviet aircraft attacking Japan's southern sea lanes would have to fly within range of radar sites in South Korea, giving an early warning of impending attack to interceptors based in Japan or Okinawa. The other advantage is that a friendly cooperative South Korea would make mining or patrolling the Tsugaru strait, which they both border, much easier. In certain circumstances South Korea might even participate in patrolling the strait.

Unfortunately relations between South Korea and Japan have not always been friendly. South Korea harbors a distrust of Japan stemming from the colonial period. However, their relations have been improving and some analysts are speculating that closer defensive cooperation lies ahead.¹²¹

Taiwan is another country whose relations with Japan are not without some resentment. Taiwan was upset when Japan established diplomatic relations with China, but Japan still manages to maintain a large trade with Taiwan. In the event of war, it is likely that Taiwan would provide at least minimal assistance to Japan.

Taiwan is struggling with the problem of updating an aging fleet, so it is not likely to be able to offer

¹²⁰. Park, J. K., "North and South Korea: A Comparative Naval Study," Naval Forces, No. 11, December 1985, p. 36.

¹²¹. See Jack R. Carpenter, Jr., The Potential of The Republic of Korea Navy for Cooperations with The Japanese Maritime Self-Defense Force In The Security of Greater East Asia, Master's Thesis, Naval Postgraduate School, Monterey, California, June 1985.

any military assistance in patrolling sea lanes. Its most modern major vessel was commissioned in 1946. Despite this, Taiwan is updating its 23 ex-U.S. destroyers and 10 frigates with new anti-air defenses. However their ASW systems are obsolete and inadequate for anti-submarine patrol. Similarly their 32 maritime patrol aircraft are over twenty years old and of limited capability. Taiwan recently received two new Dutch diesel submarines, giving it a small ASW submarine force.¹²²

But Taiwan's location north of the Bashi channel, and at the end of the Ryukyu island chain, place it next to Japan's southwestern sea lane. Radar sites and sonar stations on Taiwan could provide important detection capabilities for defending Japan's sea lanes. Basing Japanese maritime patrol aircraft on Taiwan would give them longer time on station for patrolling the sea lanes. At the least, the ability to divert damaged aircraft to Taiwanese airfields could save valuable pilots and aircraft.

China, on the other hand, has a relatively powerful navy. The Chinese Navy operates 112 conventional submarines, a nuclear powered missile submarine (SSBN), three nuclear-powered attack submarines (SSN), and over seven hundred fast attack craft. Since the mid 1970's, Chinese shipbuilding has emphasized large ocean-going vessels and today China possesses a capable 'blue water' force based on sixteen destroyers and 28 frigates. For long range operations, China has built a fleet of support vessels, including 10 supply ships and 23 tankers.¹²³ The destroyers and frigates protect claims to the Paracel and Spratly Islands, and are able

¹²². Jones and Goldrick, p. 67.

¹²³. Young, P. Lewis, "Chinese Naval Developments," Asian Defence Journal, July 1986, p. 22.

to 'show the flag' in distant waters. In early 1986, a Chinese task force entered the Indian Ocean and made port calls in Bangladesh, Sri Lanka and Pakistan.¹²⁴

The Chinese Navy suffers some technological limitations that reduce its effectiveness. Inadequate surface-to-air missiles for its surface force, difficulties with the engineering plant aboard its nuclear submarines, outdated weapons and sonars for anti-submarine warfare ships, primitive electronic systems, few mine warfare vessels, and few maritime patrol aircraft with ASW or anti-ship capability, would adversely affect its performance against modern Soviet naval units.

Despite these weaknesses, China's naval power is a regional force to be reckoned with. The submarine force gives China a credible capability to cut sea lanes in the East China and South China Seas--both are well suited to diesel submarine operations. China would be able to block Soviet, or Japanese, use of the Malacca Straits.

There are several reasons for China to be hostile to the Soviet Union and friendly to Japan. Soviet 'hegemony' in Southeast Asia, particularly its support of Vietnam, its use of bases at Cam Ranh Bay, Danang and Haiphong, and increased Soviet activity in the seas adjacent to China, warrant Chinese concern. Also Chinese territorial claims to the Paracel and Spratly Islands are contested by the Soviet Union's ally, Vietnam.¹²⁵

It is unlikely that the Soviet Union would make China and Japan allies by attacking them at the same time. But if the Soviet Union attacked Japan, China

¹²⁴. Young, "Chinese Naval Developments," p. 26.

¹²⁵. Muller, David G. Jr., China as a Maritime Power, Boulder: Westview Press, 1983, p. 236.

would want to prevent Japan's defeat, and would probably render some assistance to Japan short of going to war with the Soviet Union. In light of their improving relations, China's naval assets are more likely to benefit, than hinder, Japan.

The Philippines, like Taiwan, could provide aid in the form of surveillance and basing rights by virtue of its position on Japanese southern sea lanes. Other support is unlikely as the Philippine navy is in poor material and operational shape. Foreign observers report that of 250 ships, barely 100 are now serviceable and only 30 regularly operate. When it does operate, the navy is used mostly in operations against insurgents.¹²⁸ The Philippine Navy has eight old frigates and eleven corvettes of minimal value.

However, by providing bases to U.S. forces, the Philippines helps Japan. U.S. forces stationed at the Subic Bay Naval base and Clark Airforce base could attack and destroy Soviet units based in at Cam Ranh Bay and Da Nang in Vietnam. If these Soviet forces were unchecked they could interdict Japanese sea lanes through the South China Sea. Furthermore, Japan has only expressed a willingness to protect its sea lanes out to 1000 miles, which ends just north of the Philippines. Japan is relying on the United States to secure the sea lanes beyond that limit, and without bases in the Philippines, the U.S. Seventh Fleet probably could not accomplish that mission.

Thus Japan's neighbors, while probably not providing direct assistance in defending Japan's sea lanes, could considerably ease Japanese operations, and might provide additional surveillance and early warning capabilities. This assistance, when added to Japan's security arrangements with the United States, must be

¹²⁸. Jones and Goldrick, p. 68.

considered in devising a strategy for sea lane defense. The Japanese military strategy as reflected in the disposition of Japanese forces and their cooperation with the United States are discussed next.

D. JAPANESE MILITARY STRATEGY

The impact of the government's commitment to defend the sea lanes out to 1000 miles is not yet fully apparent in the disposition of Japanese forces, reflecting the lack of a consensus on strategy. But it has prompted the SDF to expand the operating areas of their armed forces, to show more awareness of strait defense missions and sea control, and begin to engage in joint exercises with U.S. military forces. The division of responsibilities between the two nations and the U.S. perception of how Japan fits into the U.S. Maritime Strategy reflect Japan's growing role in defense.

All Japanese forces are defensively deployed on Japanese territory or in the surrounding sea. Hokkaido (the northern most of the Japanese main islands) is heavily protected. At present the GSDF have 50,000 troops, (about one third of the total) 730 tanks, and plan to station their new surface-to-surface missile (SSM-1) there. American F-16's were stationed at Misawa in 1985 to provide additional air coverage for Hokkaido. But the ASDF continues to deploy most of its interceptors in positions to defend the main islands of Honshu, Kyushu, Shokoku, relegating sea lane defense to a secondary role. Half the JMSDF's forces, including their most capable destroyers, are assigned to four escort squadrons and the other half are assigned among the ten regional escort divisions.

But recently the Japanese government has allowed SDF units to expand their operations. Several MSDF

units have taken "world tours" to North and South America. In June 1984 a destroyer and training ship made an overseas trip which called on eight countries, visited fourteen foreign ports and travelled 32,000 nautical miles, stopping in the United States, Canada, Panama, Venezuela, Colombia, Brazil, Uruguay and Argentina.¹²⁷

The Japanese reliance on U.S. military assistance has been noted. Specifically the Japanese see the U.S. defending the sea lanes beyond 1000 miles by achieving naval superiority over the Soviets and destroying Soviet submarines. Within 1000 miles the Japanese see themselves carrying out defensive missions such as minesweeping, strait defense, defensive minelaying, escorting convoys, maritime air patrol, surveillance, and air defense. The Japanese have always relied on the United States to carry out offensive missions, such as attacking Soviet naval and air bases and sending nuclear attack submarines into Soviet waters to attack submarines and ships. In addition the Japanese expect assistance from U.S. fighter aircraft stationed in Japan to help achieve air superiority over Japan.

The Japanese offer to defend the sea lanes out to 1000 miles also brought about a marked increase in military cooperation between the armed forces of the two countries.

As has already been noted, under treaty arrangements, the Japanese allow the stationing of U.S. troops in Japan and the use of Japanese bases. Furthermore, the Japanese pay for the U.S. forces. The cost to Japan in 1982 was US\$1.05 billion. Japan pays US\$21,000 per US

¹²⁷. McIntosh, p. 48.

soldier per year, compared to a West German contribution of US \$5,666.¹²⁸

The Japanese government also cooperate with the U.S. Navy by allowing nuclear powered and nuclear equipped ships use Japanese ports. The visit of an American nuclear-powered aircraft carrier, Carl Vinson, to Japan in December 1984, highlighted the willingness of the Japanese government to allow the United States to ignore the Japanese non-nuclear policy. The fact that American warships entering Japanese territorial waters and ports carry nuclear weapons is widely recognized in Japan.

In recent years cooperation between the two governments has resulted in joint military operations. By 1982, in a break with policy prior to 1980, the Japanese had participated in several RIMPAC exercises (joint U.S.-allied naval exercises).¹²⁹ Since then Japanese naval units annually take part in RIMPAC and FLEETEX Pacific Ocean exercises. In April 1983, Japanese GSDF troops took part in exercises at Fort Ord, California. In September 1985 the first joint U.S.-Japan command post exercise was held involving ninety ships, 125 aircraft and 22,000 Japanese personnel. During this exercise American marines and Japanese troops staged an amphibious assault on Hokkaido.

The American military is heartened by this increased military cooperation and see Japan's participation as vital to the United States in the event of war in the Pacific. In particular the U.S. Navy depends on Japanese cooperation to carry out it's

¹²⁸. In comparison the US agreed to pay the Philippines \$900 million over five years to use Subic Bay and Clark Airforce Base.

¹²⁹. Leherack, Otto, III, Lt. Col., USMC (Ret.), "Search for a New Consensus", Proceedings, March 1984, p. 98.

Pacific Maritime Strategy, and sees Japanese sea lane vulnerability as an opening the Soviets could use to destroy the U.S.-Japan alliance.¹³⁰ Without the use of Japanese bases and cooperation of the Japanese government, the U.S. Maritime Strategy would fail in the Pacific.¹³¹

The U.S. Maritime Strategy calls for three carrier battle groups, one battleship surface action group, three underway replenishment groups, and an undisclosed number of submarines to deploy to the Northwest Pacific to strike Soviet forces and territory. This "forward defense" will establish U.S. control of the Pacific by destroying Soviet bases, aircraft, submarines and ships, or bottling them up in Soviet waters. This strategy risks the U.S. aircraft carriers to attack by Soviet aircraft and submarines. It relies on Japan to protect its territorial land, sea, and air space, providing a screen for U.S. naval forces, and on Japanese bases to sustain American forces at sea.¹³²

From the Japanese perspective there are several weaknesses to the U.S. strategy. Japan is dependent on the U.S. for defense, but the U.S. is formally committed to come to Japan's aid only if its territory is attacked, not its sea lanes. Another weakness is that Japan assumes that the U.S. will protect the sea lanes beyond 1000 miles, but the American Maritime Strategy provides no escorts for sea lane defense. Finally, the Japanese are concerned that in the event

¹³⁰. Rothchild, Randall L., LCDR, USN, "Japan's Oil Dependence--Implications to U.S. Maritime Strategy," unpublished paper submitted to the U.S. Naval War College, 3 March 1986, p. 7.

¹³¹. Begbie, A. J., CDR, USN, "Japan's Influence on the U.S. Maritime Strategy," an unpublished paper submitted to the U.S. Naval War College, 15 May 1987, pp. 14-20.

¹³². Cotton, Lawrence S., Jr., LCDR, USN, "Potential Japanese Support of U.S. Maritime Strategy," an unpublished paper submitted to the U.S. Naval War College, 18 February 1987, pp. 5-19.

of global war, U.S. commitments to NATO may be given priority, drawing American forces away from the Pacific and leaving Japan inadequately defended.

Japan's continued over-reliance on U.S. forces for defense, is the result of the lack of consensus on a unified military strategy for Japan, rather than on an objective appraisal of the situation. While Japan should continue to cooperate with the U.S. and can rely on the U.S.-Japan security treaty for some protection, it must develop a more independent strategy for sea lane defense. Relying on U.S. power projection, this strategy should concentrate on defending Japan's sea lanes through closer cooperation with neighbors and the selected build up of the SDF. The factors that should be considered in sea lane defense and the current threat are discussed in the next chapter.

V. SEA LANE DEFENSE: CHALLENGES AND IMPERATIVES

Certain factors, such as the Soviet ability to interdict sea lanes with attack aircraft and submarines, the Soviet appreciation of mine warfare, and the effectiveness of convoys for protecting merchant ships, are habitually overlooked or underemphasized in the study of Japanese sea lane defense. This chapter will review the experiences of sea lane defense in World War II, some proposals for defending Japan's sea lanes, Soviet capabilities for interdicting Japan's sea lanes, and factors that must be considered in defending sea lanes. Finally several ways that Japan can improve the defense of its sea lanes will be suggested.

A. PREVIOUS STUDIES

This thesis has argued that the Japanese government has only recently begun to seriously consider defending its sea lanes. In developing a strategy for sea lane defense, the Japanese should carefully consider lessons of the past.

World War II taught two lessons concerning sea lanes: mines are extremely effective, and convoys are the best method to protect merchant ships against sea lane interdiction. Technological advances have enhanced, not diminished, these two lessons and their importance to sea lane defense.

Mines are the most cost-effective form of naval warfare. In an article, Navy International recounts the advantages of mines.

Mines are small, easily concealed, cheap to acquire, require virtually no maintenance, have a long shelf life, are easy to store in considerable numbers, and can be laid easily

and simply from almost any type of platform...¹³³

While relatively easy to sow, they can deny use of the sea to greatly superior naval forces, and require an effort out of all proportion to their size to neutralize them.

During World War II, mines were widely and effectively used by both sides. Germany laid well over 100,000 mines, sinking 650 ships, while the Allies sowed some 250,000 mines sinking 1000 ships. Some analysts calculate that one out of every 40 mines laid in World War II proved effective.¹³⁴

The American mining campaign against Japan is particularly impressive. 25,000 mines sank or damaged 1075 ships, equal to over two million tons of Japanese shipping.¹³⁵ These mines were laid with the loss of only 15 aircraft. In comparison, U.S. submarines produced 4.8 million tons of Japanese shipping casualties at cost of 40 submarines and 3,000 lives lost.¹³⁶ Even more impressive is the success of the inner zone mining campaign in the final six months of the war. This campaign alone almost completely stopped Japanese shipping and caused 63 percent of all Japanese merchant ship casualties during that period.¹³⁷

Countermeasures against mines in World War II required a tremendous effort. By 1944 the Allies deployed some 1,500 mine countermeasure vessels and

¹³³. Navy International, "Mines and Mining," Vol. 91, No. 2, February 1986, p. 106.

¹³⁴. Navy International, "Mines and Mining," p. 106.

¹³⁵. For a detailed analysis of the effectiveness of the American mining campaign see Ellis A. Johnson and David A Katcher's, Mines Against Japan, Naval Ordnance Laboratory, Government Printing Office, 1973.

¹³⁶. Hoffman, Roy E., RADM, USN, "Offensive Mine Warfare: A Forgotten Strategy?," USNI Proceedings, Vol. 103, May 1977, p. 150.

¹³⁷. Johnson and Katcher, p. 29.

300,000 men to clear mines. The Japanese effort to clear mines from World War II lasted until 1970.

Several more recent uses of mines attest to their continuing effectiveness. In the Korean War a force of North Korean sampans and junks mined the port of Wonsan with a field of 3,500 moored contact and ground influence mines, delaying the landing of a U.N. amphibious force for eight days. The U.S. Commander, Rear Admiral A. E. Smith observed, "We have lost control of the sea to a nation without a Navy, using obsolete weapons, delivered by ships which were in use at the time of Christ."¹³⁸ In another instance, the U.S. sealed the harbor of Haiphong in 1972, forcing the Vietnamese to abandon the harbor. It took U.S. minesweepers 63 days to clear the harbor after the war. More recently, the Red Sea mining incident in 1984 required a force of 34 mine sweepers and support ships with 3000 men 60 days to clear the shipping lanes.

The Soviet Union and the U.S. have spent considerable effort to develop advanced mines, including some that are contain acoustically homing torpedoes. Both superpowers have mines they can employ in water up to 2000 meters deep, and the Soviets may be able to mine as deep as 3000 meters.¹³⁹

Another lesson from World War II that still pertains today, is that an interdiction campaign waged by submarines is most effectively countered by convoying merchant ships. World War II presents a very interesting study of submarine campaigns against merchant shipping because two campaigns were waged with opposite results. Retired Captain Roland Bowling compiled an extensive study of these two campaigns and concluded that the German campaign against allied

¹³⁸. Navy International, "Mines and Mining," p. 107.

¹³⁹. Navy International, "Mines and Mining," p. 110.

shipping was defeated by the convoy system and a vigorous anti-submarine program. On the other hand, the Japanese merchant marine was almost completely destroyed by Allied mining and submarine campaigns, and a significant cause of this defeat was the fact that the Japanese did not institute a convoy system until it was too late.¹⁴⁰ Bowling finds that in convoys across the North Atlantic only 0.7 percent (seven-tenths of one percent) of ships sailing in convoys were sunk. Of all the ships sunk in World War II, 72 percent were steaming independently and only 28 percent were in convoys, and some counted in the latter category were convoy stragglers. Even convoys with few escorts were much safer than ships sailing independently. However, as the number of escorts per convoy increased, the number of attacking submarines that were sunk increased dramatically. Bowling also found that increasing the number of ships in the convoy, and thus decreasing the frequency of the convoys, did not appreciably affect the percentage of merchant ships sunk.¹⁴¹

Another study conducted by the Atlantic Council of the United States resulted in conclusions similar to Captain Bowling's findings. This study, published as Securing the Seas, stressed the concept that sea lane defense is a "war of attrition." The attacking submarines must sink enough merchants ships to cripple the opponent's war effort, before the enemy's anti-submarine warfare forces destroy all the attacking submarines. Securing the Seas studied the ratios of merchant vessels sunk compared to submarines destroyed

¹⁴⁰. Japan began the war with 6,000,000 tons of merchant shipping and ended with a mere 312,000 tons. Of this 56 percent was sunk by American submarines. Bowling, Roland Alfred, Capt., USN, (Ret.), The Negative Influence of Mahan of the Protection of Shipping in Wartime, Ph.D. thesis submitted to the University of Maine at Orono, May 1980, p. 451.

¹⁴¹. Bowling, pp. 473-486.

and found that when the U-boat campaign was directed against ships sailing independently the exchange rate was 12.8:1. (12.8 merchants sunk for every submarine lost.) But when the U-boat campaign first shifted to attacking convoys, the exchange rate fell to 2.6:1. By the end of the war the exchange rate against convoys fell further to 0.6 merchant ships sunk for every U-boat lost. Furthermore, using analytical models based on World War II data and adjusted for improved technology, the study tested two other variables: the effects of having more ASW forces at the beginning of the war; and the effects of deploying all the submarines before beginning the interdiction campaign. The conclusions were significant. Having a larger number of ASW forces at the beginning of the campaign did not enable the ASW forces to protect the merchant vessels much better. However they were able to sink the attacking submarines at a faster rate, reducing the number of submarine attacks, which resulted in fewer merchant ships sunk over the first 90 days. For the other variable, the study found that predeploying the attacking submarines was a better strategy for the attacker. None of the submarines would be lost in chokepoints or ASW barriers while deploying, resulting in a larger initial submarine force. The larger surviving submarine force then sank a larger number of merchant vessels. However, the submarines did not escape the inevitable outcome. Because the merchant ships so outnumber the submarines, even a relatively small rate of attrition will mean that the submarines will be destroyed before being able to destroy a significant portion of the merchant fleet, if the submarines are opposed by ASW forces.¹⁴²

¹⁴². Nitze, Paul H., and others, Securing the Seas, Westview Press, 1979, pp. 337-382.

Other analysts come up with similar findings.

Commander E. Cameron Williams studied convoying through history and found certain patterns or "laws" persist.

At the outbreak of war:

1. Shipowners always resist convoying.
2. Naval authorities, too, resist convoying, although for different reasons.
3. Merchant ship losses, once the enemy mounts an attack on shipping, are unacceptably high.
4. Convoying has always proved to be the only workable solution.¹⁴³

Williams finds that by the end of 1939, the Royal Navy had escorted 5,756 merchants in convoy, losing 12. In the same period 102 independent merchants were sunk. Most significantly, more submarines were lost attacking convoys than in attacking independents.¹⁴⁴

Not all naval experts agree with convoying. Captain S. D. Landersman, feels that technological advances in submarines may make them more efficient. The high-speed nuclear attack submarine with unlimited submerged endurance, antiship missiles, and long-range homing torpedoes, supported by a complex ocean surveillance system, and the threat from land-based aircraft, may make convoys less effective. He feels that today's faster larger merchant ships, modern anti-submarine weapons, and surveillance systems make a "protected lane" strategy more feasible. In this strategy ASW forces patrol a shipping route, searching for and destroying submarines, while merchants sail individually at their best speed.¹⁴⁵

Commander William Mellin disagrees. Mellin points out that the success of convoying in World War II resulted from the principle of concentration of force

¹⁴³. Williams, E. Cameron, CDR, USNR, "The Four 'Iron Laws' of Naval Protection of Merchant Shipping," Naval War College Review, Vol. XXXIX, No. 3, May-June 1986, p. 35.

¹⁴⁴. Williams, p. 40.

¹⁴⁵. Landersman, S.D., CAPT, USN, (Ret.), "Naval Protection of Shipping: A Lost Art?" Naval War College Review, Vol. XXXIX, No. 2, March-April 1986, p. 26-31.

not technological advantages. The hunter-killer groups deployed against the submarines had the same equipment as convoy escorts and were specifically tasked to destroy submarines, yet 65 percent of the German U-boats were sunk by convoy escorts and only 27 percent by the ASW groups. The reason is simple. The hunter-killer groups had a higher kill probability--if they made contact. The submarines had to challenge the convoy escorts to attack the convoy and consequently the escorts had many more contacts--and kills.

Mellin also points out that the high speed advantage of nuclear submarines (SSN's) is of less tactical usefulness than is typically assumed. While SSN's are running at high speeds they drastically reduce the effectiveness of their sonars. They are essentially running blind. Mellin examines three possible tactics.

With a speed of advance of 25 knots, the SSN could conceivably run at 25 knots, sprint at 27 knots and listen for one half hour at 10 knots, or sprint four hours at 29 knots and listen one hour at 10 knots. In the first instance, the submarine is noise limited 100% of the time, in the second 88%, and in the third 80%. In effect, the SSN becomes no more than a noisy, high-speed transitting submarine with a secure detection capability against a barrier submarine estimated to be less than .01, a very high probability of being killed, and a weapon system vulnerability of about .99.¹⁴⁶

This indicates that a submarine stalking a convoy is still speed limited when setting up its attack approach, especially if the convoy is employing zig-zag tactics and randomly changing course. Mellin also cites a U.S. Navy study completed in 1974, Project Sea Express, that concluded that no independent shipping method was as effective as convoying to support his contention that convoying is still effective against modern submarines.

¹⁴⁶. Mellin, William F., "To Convoy or Not to Convoy," USNI Proceedings, Vol. 103, No. 3, March 1980, p. 52.

Mellin's arguments are sound. But it seems that those who argue that technological advances have improved the performance of submarines more than that of anti-submarine warfare, making submarines more efficient sinkers of merchant vessels, are missing the point. Shipping interdiction campaigns are "wars of attrition" pitting submarines against merchants and ASW forces against submarines. Since there are so many more merchant ships than submarines, even a low attrition rate against the submarines will result in the destruction of the submarine force before a decisive number of merchants are sunk.

Mellin also analyses two alternate convoy strategies: "continuous shipping" and "pulsed shipping." In continuous shipping, smaller convoys steam more frequently. In pulsed shipping very large convoys are sent at infrequent intervals, overwhelming the attacking forces. Although pulsed shipping could reduce ship losses substantially, it has several drawbacks. Pulsed shipping requires a larger number of ships and forces them to wait for extended periods until the next convoy sailing. More importantly, large convoys create problems such as port congestion, loading and delivery rates, warehouse capacity, and command and control. Pulsed convoys also make attacks on port facilities a more efficient, and more attractive, alternative to sea lane interdiction. These disadvantages make smaller, more frequent convoys a better strategy.¹⁴⁷

The lessons of World War II indicate that the offensive and defensive use of mines is one of the most effective forms of naval war, and that Japanese waters are particularly susceptible to mining. The other lesson is that convoying is still likely to be the most

¹⁴⁷. Mellin, p. 53.

effective counter to a sea lane interdiction threat, despite modern advances in submarines and anti-submarine warfare.

Although the Japanese government has not officially adopted a strategy for sea lane defense, several proposals for Japanese sea lane defense have been offered. Three alternative proposals will be examined, the Sekino Plan, the Schilling Plan, and the Taoka Plan.

Commander Hideo Sekino, a retired officer of the Imperial Japanese Navy, proposed a plan to defend Japan's sea lanes in 1971. In Sekino's plan the GSDF would have primary responsibility for the defense of Hokkaido, for which he feels they have sufficient force.¹⁴⁸ The ASDF has primary responsibility for establishing air superiority over Japan and the surrounding seas. The MSDF must protect Japan from invasion and protect the sea lanes, a task for which they need more forces.

Sekino feels that the Soviet Union threatens Japan. He observes that there are three possible Soviet attacks on Japan, nuclear attack, invasion, or the destruction of shipping. The first two attacks obligate the United States to come to Japan's aid under the U.S.-Japan security treaty. But a Soviet attack on Japanese merchants on the high seas does not.

Sekino says the major threat to Japan's sea lanes is from the Soviet Pacific Fleet, particularly its submarines, and to a lesser extent long-range bombers. Sekino notes that mining is also very effective in Japan's waters. In view of Japan's dependence on the sea lanes, and the prospect that Japan might have to

¹⁴⁸. The analysis of Sekino's plan is based on a description he published in his article "Japan and Her Maritime Defenses," USNI Proceedings, Vol. 97, No. 5, May 1971, pp.100-21.

defend them alone, Sekino argues that protection of sea communications should be given highest priority in the national defense of Japan.

To make the defending Japan's sea lanes more manageable, Sekino would cut ocean-going shipping to less than half its peacetime level. Coastal shipping would be diverted to land routes as much as possible. And Japanese shipping would operate only in the area north of Indonesia, between Japan and Australia, and between Japan and the United States.

At the heart of Sekino's Plan is a proposal to use the two great island chains to the south of Japan to form a protected "Maritime Safety Zone" which would make the defense of shipping possible even against a powerful submarine force. The eastern island chain runs from the Izu Islands, south of Tokyo Bay, to the Ogasawaras (Bonin Islands), Iwo Jima, and the Marianas (and Guam). The western chain runs from Kyushu to the Okinawas (Nansei Islands), Taiwan, the Philippines and then to Borneo. (See Figure 3 for a map of this area.) Sonar stations and bases for ASW planes and helicopters would be established on some of these islands. These bases, operating in cooperation with hunter-killer groups in the zone, would steadily find and destroy enemy submarines. To destroy attacking aircraft, some of the island bases would operate air search radars and VTOL (vertical take-off and landing) fighters.

Sekino points out that the three straits leading into the Sea of Japan could be mined to prevent the passage of Soviet submarines and surface ships, but notes that Japan has a small mine-laying capability. This could be augmented by converting some small merchant vessels to minelayers in a war.

Sekino estimated his plan would require 15 submarines (including 6 nuclear-powered attack

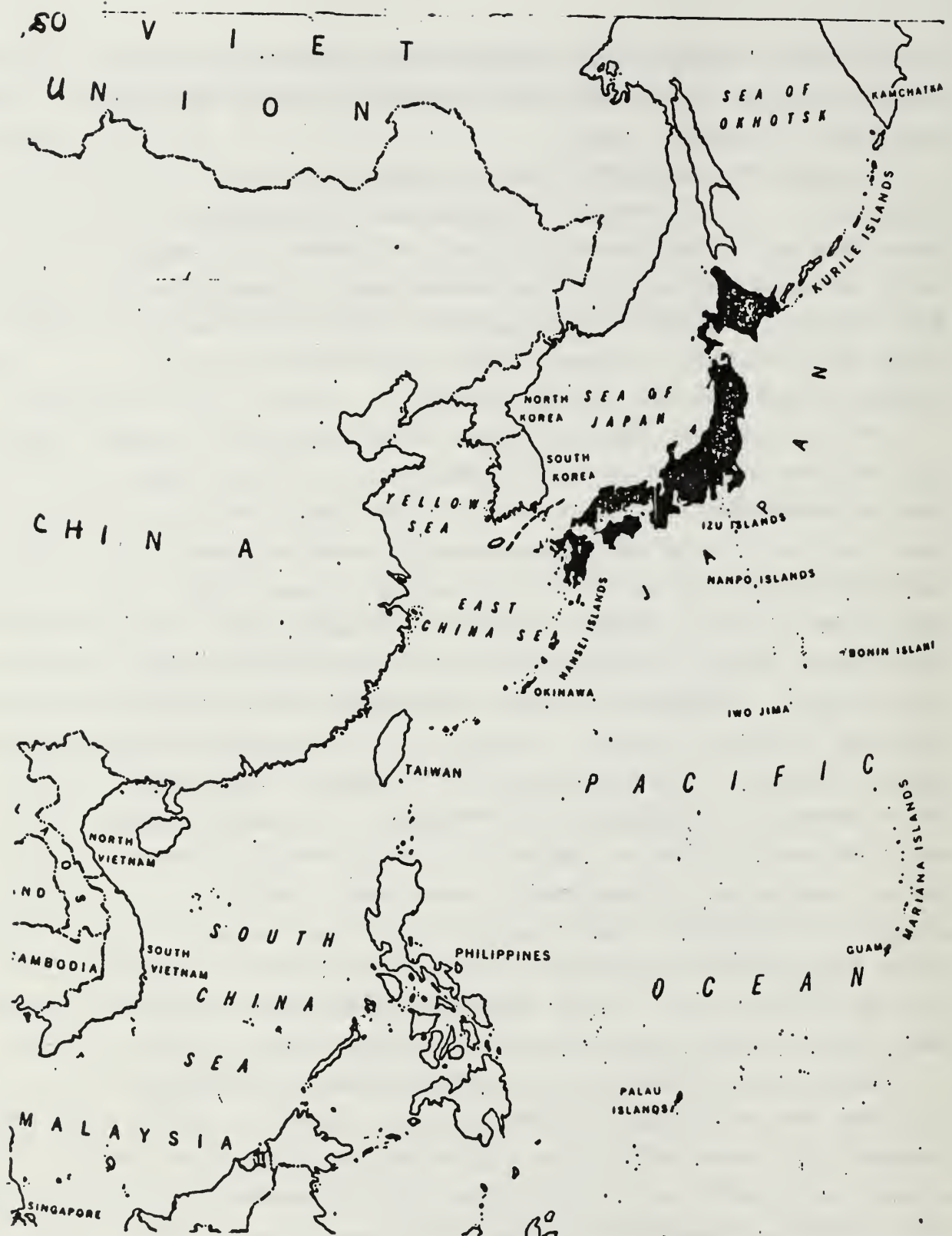


Figure 3: Sekino's Maritime Safety Zone

submarines), 3 small aircraft carriers (20,000 tons), and 96 destroyers for anti-submarine operations. An additional 32 destroyers and frigates, and 92 patrol craft were required for coastal defense. The mine warfare force would have 64 ships. Finally, 200 land-based fixed-wing patrol aircraft, 24 flying boats, and 348 helicopters, or 570 total aircraft, would provide the air ASW assets.

In Sekino's plan the enemy submarines would suffer attrition from mines and coastal patrols as they passed through the straits, from island based patrols as they passed the island chain barrier, and finally from the hunter-killer groups as they operated in the zone. Sekino would only provide direct convoy escorts for important cargoes, or in certain zones.

Sekino's plan has much to recommend it, but has several weaknesses. The Soviet air threat, which was not as capable at the time he conceived his plan, has grown. He overestimates the effectiveness of VTOL aircraft which have limited range, endurance, and weapons carrying ability. Secondly, his plan rests on the effectiveness of area ASW, the attrition of the attacking submarines by hunter-killer groups, more than on actually escorting and defending the convoys. Therefore, it supposes that enough resources are stockpiled in Japan to sustain the economy for the amount of time it will take to destroy the attacking submarines. Finally, his plan, by including aircraft carriers, even small ones, would be hard to implement politically, since Japan's possession of "offensively capable " aircraft carriers is highly controversial.

An American analyst, David Shilling, suggested a plan which would enable Japan to provide a large part of its sea lane defense needs without a large military that would provoke domestic and international

opposition. By taking economic measures to reduce their dependence on imports during a crisis, and by using non-provocative military measures, Japan could reduce the threat of sea lane interdiction.¹⁴⁹

Shilling agrees with Sekino that naval defense should be a high priority because interruption of shipping is the most serious conventional threat to Japan and where its capabilities are the weakest. He also sees the large number of Soviet submarines as Japan's biggest threat. Shilling feels that two obstacles prevent Japan from acting on this need. The Japanese tendency to concentrate on the constitutional and political constraints which limit the size of the military, and the widespread feeling that sea lane defense is impossible. Shilling proposes that Japan counteract its dependence on sea lanes within its political constraints. Shilling's proposal has three parts: Japan must cut its import requirements in war; minimize the vulnerability of its remaining required imports; and neutralize the submarine threat with non-provocative military measures.

Shilling argues convincingly that, in a war of attrition between merchant ships and submarines, it is necessary for the country being attacked to be able to hold out for several months while its ASW forces destroy the submarines. The submarines suffer cumulative attrition as they move through barrier, area, and convoy ASW defenses.

Approximately 1,850 ships visit Japanese ports each month, delivering an annual cargo of some 600 million tons. This huge volume of Japanese peacetime merchant shipping would be impossible to protect during wartime without maintaining a large standing escort fleet and

¹⁴⁹. The description of Shilling's plan comes from his article "A Reassessment of Japan's Naval Defense Needs," Asian Survey, Vol. 16, No. 3, March 1976.

alarming other Asian nations. In wartime, the volume of imports could be cut by a reduction in personal consumption and suspending of all export production. Shilling calculates the amount of imports that could be cut by determining the amount of imports that the Japanese economy is using to produce its exports. The remaining imports are consumed by the populace. Shilling concludes that Japan's imports could be cut by over 71 percent. The remaining imports could be delivered in approximately 400 ship arrivals per month. Furthermore, if the Japanese government instituted rationing and war taxes, import requirements could be to only 250 ship arrivals per month. This level constitutes the "austere import requirements."

Instead of cutting personal consumption, the Japanese government could stockpile needed resources. For example, oil accounts for over 75 percent of austere import requirements. If the Japanese government stockpiled a 70 days peacetime supply, and then used it at a lower rate by cutting out export production, this would reduce wartime import requirements to 280 ship arrivals per month for five months until the stockpile ran out. (It should be noted that this is accomplished without the cut in personal consumption mentioned earlier.)

Shilling holds that Japan can take the measures to protect its minimum required ships. They should be routed on sea lanes as far away from the submarine threat, forcing the submarines to make the longest possible transits. Against Soviet submarines, these routes would be directly to the south of Japan between the Philippines and Guam. Oil tankers coming from the Persian Gulf should avoid the Strait of Malacca, using either the Torres Strait or going all the way around Australia.

To protect shipping, Shilling estimates that with a force of 45 destroyers, the MSDF could escort four convoys from distances of 4000 nautical miles (figuring 12 days at 15 knots per hour and three days inport at either end). This would protect convoys from as far away as Indonesia. By imposing austere economic measures and stockpiling, Shilling estimates that Japan could get by on the four or five 60 ship convoys a month the MSDF could convoy.

Shilling believes that these measures would limit Japanese shipping losses to the absolute minimum, leaving the MSDF the job of destroying the attacking submarine force. To accomplish this, the MSDF should build and stockpile enough mines to close the three straits. Additional barriers of moored magnetic and U.S. Captor mines could be laid in gaps between islands, such as between the Ryukyu Islands from Kyushu to Taiwan. Patrol aircraft would be able to cover the ocean between Japan and the Philippines (Sekino's Maritime Safety Zone) from bases in Japan, Okinawa, and Iwo Jima, adding to the attrition rate.

Shilling acknowledges that Soviet submarines operating out of the base at Petropavlovsk would present the most difficult problem since there are no geographical choke points. He suggests that anti-submarine patrol aircraft using sonobuoys might have some success against them.

Shilling's plan depends on the Japanese being able to drastically cut consumption and to stockpile enough supplies to be able to hold out for up to six months while the MSDF's limited ASW forces destroy the attacking submarines through attrition.

Shilling's estimates of the amount of imports that the Japanese could safely cut from their economy is optimistic to say the least. His austere requirements

represent only 29 percent of peacetime imports. It is doubtful if a resource poor nation like Japan, could sustain such a shock the loss of these imports would mean to its economy. Secondly, these import reductions would be coming during a war when Japan would need imports of resource like coal and iron (which Shilling cuts by 87 percent) to build munitions to defend itself. The increased operational tempo of Japan's armed forces would consume much of the oil saved by ending export production. Lastly, it is likely that such a massive SLOC interdiction campaign against Japan would come during a global war, when allies would need Japan's productive capacity. If the campaign were only directed against Japan, then the United States would undoubtedly assist its most valued Pacific ally.

Shilling is right to propose a plan which considers the political views of the Japanese themselves, but then he proposes that Japan escort convoys from 2,100 and 4,000 nautical miles away. The Japanese government decision to protect its sea lanes out to 1000 miles was a controversial decision. There is no indication yet that they would go further.

Shilling's concern over the submarine base at Petropavlovsk is well warranted as it is principally a submarine base. Although most of the diesel submarines operate out of Vladivostok, they could easily be transferred in a war. Petropavlovsk has unobstructed access to the Pacific, which is clearly an important consideration for a submarine operations. However, the fact that more of the diesel submarines are not stationed there already is suggestive. The reason may have to do with logistics. Petropavlovsk has no land route capable of handling freight. Virtually all supplies are brought in by sea, but the northern sea route is only open for a small part of the year. The

small, but capable, Japanese force of diesel submarines could give the Soviets a sea lane interdiction problem of their own, if the base had to be supplied from Vladivostok.

The largest oversight in Shilling's plan, is that he completely overlooks the air threat. This is probably because he felt that a submarine interdiction campaign was more serious. With additional Soviet Backfire bombers stationed in East Asia and improved air launched anti-ship missiles, that may no longer be true.

Another proposal to defend Japanese was advanced by Shunji Taoka, a military analyst for the Asahi Shimbun. Taoka suggested building a force of 1,500 helicopters to be stationed on the merchant vessels themselves. Taoka estimated that such a force could protect one 50 ship convoy per day between Tokyo and San Francisco, supplying one million tons of imports daily, for less than it would cost to support a force of destroyers large enough to accomplish the task.¹⁵⁰

A similar idea has been proposed in the United States. Named the "Arapaho" project, it calls for placing modern ASW helicopters on large fast container ships. On these ships, certain containers would be replaced with containers converted into berthing compartments, maintenance workshops, washrooms, fuel and water tanks, and storerooms. The system would be sturdy and dependable, and except for the helicopter, able to sit idly in a container for ten or twenty years, getting minimal upkeep, and a few isolated exercises along the way.¹⁵¹

¹⁵⁰. Auer, p. 165.

¹⁵¹. The information on the Arapaho project is from Gerald G. O'Rourke's "A Good New Idea," U.S. Naval Institute Proceedings, Vol. 103, No. 3, March 1980.

Captain Gerald O'Rourke contends that commercial helicopters can be adapted for Arapaho in time of war, and flown by Naval Reserve pilots. This would keep expenses low. The Arapaho helicopters need not be as fully capable as military helicopters, but could play a supporting role, such as carrying additional torpedoes.

There are three drawbacks to this system. Proponents of Arapaho typically underestimate the support requirements for operating aircraft. It is one thing for a merchant to have a helicopter landing pad to transfer personnel or light freight. It is quite another to be able to fuel, arm, and maintain a helicopter for weeks or months at a time. Secondly, what about operations? A typical take off and landing on a small aviation capable surface escort requires twenty-six members of ship's company in addition to the aviation detail of about twenty. This is about twice the manning of some merchants. Thirdly, most merchants do not carry the required special equipment. Torpedoes need to be stored in a magazine and require expert maintenance and handling. Night operations require special lights, communications equipment, sophisticated radar, navigational aids and other equipment not normally found on merchant ships. A related problem is that one helicopter operating alone is not very effective against a modern submarine. Good anti-submarine warfare requires coordination with other units that only comes with intensive training. The Arapaho project may look good on paper, but is not likely to provide much help in protecting sea lanes.

A more recent variation of this proposal is the development of a crane system that enables small warships to operate VTOL aircraft such as the Harrier. Termed "Skyhook," this system would allow frigates as small as 4,000 tons to operate high performance jet

aircraft. The Harrier hovers alongside and is captured by a ship-mounted crane which can then place it precisely in position on the deck.¹⁵²

Promoters claim Skyhook gives small ships a tremendous increase in potential anti-air warfare, surveillance, and anti-ship capability. Ships slightly larger than the typical ASW frigate could carry two or three Harriers and provide at least minimal air coverage for an entire convoy.

The Japanese MSDF has expressed an interest in Skyhook as an alternative to building conventional aircraft carriers. According to Jane's Defence Weekly, British Aerospace and Dowty, the developers of Skyhook, have been talking to Japanese industry officials and "the MSDF could become the first operator of the Skyhook system."¹⁵³

This would be a mistake. While small warships could support the operations of Harrier aircraft, unlike the merchant ships in the Arapaho project, the Harrier is limited in range, endurance and weapons load as an interceptor against high performance attack aircraft. The Japanese MSDF operates for the most part within range of land based air support. Rather than spend money on a new system that would added a few limited capability aircraft to their inventory, the Japanese would do much better buying more land based F-15's, or tanker aircraft that would increase the combat range of existing land based fighters.

World War II teaches two lessons: mine warfare is very effective, and that the convoy system will defeat a sea lane interdiction campaign. Having examined

¹⁵². Fozard, John, Heinz Frick, and Denis J. Mottram, "Skyhook: Tactical Air for Smaller Ships," USNI Proceedings, Vol. 112, No. 11, p. 61.

¹⁵³. Cook, Nick, "JMSDF May Become First Operator of UK's Skyhook," Jane's Defense Weekly, Vol. 8, No. 14, 10 October 1987, p. 784.

several proposals for sea lane defense, this paper will discuss the Soviet threat to Japan's sea lanes.

B. THE SOVIET THREAT TO JAPANESE SEA LANES

The Soviet Union's presence in East Asia is menacing--and growing. It deploys 40 divisions, 370,000 troops, east of Lake Baikal. Also assigned to this region is a quarter of the Soviet Air Force--about 460 bombers, 1,610 tactical fighters, and 150 patrol planes. Over a quarter of the Soviet Navy is based in this theater with about 82 major surface combatants, 109 submarines, two Kiev-class aircraft carriers, the Minsk and the Novorossiysk, Kara-class missile cruisers, and Krivak-class missile destroyers. One-third of the Soviet nuclear arsenal is deployed in the region, including SS-18s and SS-N-18s and 135 SS-20s. Of particular concern to the Japanese is the deployment of a Soviet division on the disputed northern territories of Kunashiri, Etorofu, and Shikotan, and the building of a new submarine base at Simushir.¹⁵⁴

The Soviet Union poses the greatest military threat to Japan. The Soviet Union has at least 135 SS-20 missiles and 80 Backfire bombers in East Asia. The Soviet Pacific Fleet, the largest of the Soviet fleets, has bases close to Japan at Vladivostok, Petropavlovsk, Sovetskaya Gavan, Korsakov, and Aleksandrovsk. The fleet is split between two base complexes at Vladivostok and Petropavlovsk. Most nuclear submarines are based at Petropavlovsk, while diesel submarines and most surface forces are homeported in Vladivostok. Naval aircraft are based at Sovetskaya Gavan. In addition the Soviet bases at Cam Ranh Bay and Da

¹⁵⁴. Defense of Japan, 1984, Tokyo: The Japan Times, 1984, pp. 30-35.

Nang threaten shipping in Malacca Straits and could curtail Japan's oil supplies.

The Soviet Pacific Fleet has been the fastest growing fleet. Especially significant is the increase in naval aviation, amphibious forces, and surface combatants. Particularly ominous for sea lane defense is the large number of submarines and naval attack aircraft stationed in the Pacific.

The growth of Soviet Naval Aviation has led one commentator to say that "the SNA is the most powerful component of the Soviet Pacific-based forces for fighting a conventional war in the Pacific."¹⁵⁵ Backfires, Bears, and Badgers project power far into the Pacific. Armed with the AS-4 cruise missile, the Backfire has an unrefueled combat radius of 3000 nm and can attack ships from 250 miles away.¹⁵⁶ The Bear C/G, armed with the AS-3 has a combat range of over 4000 nm. The Badger carries either the AS-5 with a 100 mile range or the AS-6 with about a 200 nm range, and has a combat range of 2000 nm.¹⁵⁷ Soviet Naval Aviation now has from 130 to 160 long-range bombers in East Asia. In addition, the Soviets currently have 16 Badger and 4 Bear aircraft permanently based at the Cam Ranh Bay complex.¹⁵⁸

The major wartime mission of the SNA is to destroy enemy ships, in particular US carrier task forces, and ballistic missile submarines.¹⁵⁹ Sergei Gorshkov,

¹⁵⁵. Jacobs, G. "Soviet Pacific-based Strike Forces" Asian Defence Journal, January 1986, p. 12.

¹⁵⁶. Understanding Soviet Naval Developments, Office of the Chief of Naval Operations, Department of the Navy, Washington, D.C., April 1985, p. 30.

¹⁵⁷. Jacobs, G., "Soviet Naval Aviation in the Pacific," Navy International, Vol. 92, No. 6, June 1987, p. 346.

¹⁵⁸. Jacobs, "Soviet Naval Aviation," p. 344.

¹⁵⁹. Jacobs, "Soviet Pacific-based Strike Forces," p. 12.

former Admiral of the Fleet, recently described Soviet Naval Aviation (SNA) and its capabilities.

[Soviet Naval Aviation is] one of the main striking forces of our contemporary Navy. It is genuinely oceanic. It has been transformed into an important means of warfare against the enemy's surface ships, submarines, and transports carrying troops or cargoes, either at-sea or in-port.¹⁸⁰

The Soviet Services and Branches of The Armed Forces described the SNA's missions.

Missile carrying naval aircraft are capable of launching powerful nuclear-missile strikes against highly manoeuvrable formations of surface combat ships and enemy convoys [author's emphasis] in distant regions of the sea and ocean and also against his ports and naval bases at stand-off ranges.¹⁸¹

Even the Badger has the range to strike east of Japan, or if based in Vietnam, to cover all of the South China Sea.

For sea lane defense, the deployment of about 60 Soviet TU-22N Backfire bombers in the region may be more serious than any other recent Soviet move. The supersonic bombers, have the ability to interdict vital sea lanes and attack the U.S. Seventh Fleet far at sea. Although 40 of the Backfire bombers are believed to be assigned to strategic missions, they could easily be used against shipping in a conventional war. In any event, the Backfires are much better suited for an offensive role rather than homeland defense. With inflight refueling, there is virtually no point in the North Pacific which the bombers cannot reach.¹⁸² In reaction to this deployment the Japanese Defense Agency sounded a note of alarm:

¹⁸⁰. As reported by Sankei Shimbun, Tokyo, 1 March 1985, p. 1.

¹⁸¹. Zemskov, V. F., Services and Branches of the Armed Forces, Moscow, Voenizday, 1975, as quoted by G. Jacobs, "Soviet Naval Aviation," p. 345.

¹⁸². O'Neil, William D., "Backfire: Long Shadow on the Sea-lanes," United States Naval Institute, No. 103, March 1977, p. 34.

With the deployment in the region of the Backfire bombers, the Soviet Far Eastern forces have now obtained a far superior capability to conduct anti-ground and anti-ship operations than before. It seems that Japan's air defense and protection of the seaborne traffic around Japan would be gravely affected.¹⁸³

The submarine component of the Soviet Pacific Fleet is only slightly less impressive. The Pacific Fleet consistently has approximately 40% of the strategic submarines and 55% of the general purpose submarines. Of the 77 non-ballistic missile submarines, 25 are guided missile submarines (SSG or SSGN), which means they carry anti-ship cruise missiles, either submerged or surface launched. The other 52 are torpedo submarines (SS or SSN) with either an anti-surface or anti-submarine role. In a war, the majority of these submarines would be assigned missions other than sea lane interdiction, such as anti-carrier warfare, ASW patrols against U.S. ballistic missile submarines, defense of Soviet ballistic missile submarine patrol areas, and "bastion defense," that is defending the home waters of the Soviet Union to provide a sanctuary for naval operations. Even so, undoubtedly some would be sent to interdict allied supply lines, and even ten deployed in that manner would cause havoc.

Historically the Pacific Fleet's surface units were of poorer quality than the other fleets, but this trend changed significantly in the late 1970s. In 1985 three major surface combatants were transferred to the Pacific: the Frunze, the second of the Kirov class cruisers, the Osmotritelny, a new Sovremenny class destroyer, and the Spiridonov, a new Udaloy class.

Thus the Pacific now has two of the Navy's three operational fixed-wing aircraft carriers, one of the Navy's two largest amphibious warfare ships, its own complement of Backfire bombers (20), and two of the Navy's three most specialized intelligence collection ships as well as one of two operational Kirov class

¹⁸³. Defense of Japan, 1982, p. 32.

cruisers, and one each of the Navy's most modern destroyers.¹⁸⁴

In addition to these new units, the Pacific surface force includes 82 major surface combatants and 419 other vessels.

While the Soviet surface fleet is powerful, it would not play a significant role in sea lane interdiction because of its lack of organic airpower, which makes it highly susceptible to U.S. carrier-based air attack and land-based air attack from Japan.

In addition Soviet surface units would be difficult to sustain in the Pacific because its supply lines to Vladivostok must pass through one of the three straits. Compounding this difficulty is the fact that logistics support is perhaps the weakest link of the Soviet Pacific fleet. Outdated and insufficient transfer equipment, inadequate numbers of modern high-speed replenishment ships, and an overly burdensome administration severely tax the Soviet fleet's ability to operate underway for long periods. With the exception of the Berezina, which is the only Soviet replenishment ship comparable to U.S. supply ships, Soviet supply ships are small and many have a maximum speed of 16.5 knots, which is inadequate. These ships can not provide sufficient support to maintain a battle group at sea indefinitely.

The inadequacies of Soviet underway replenishment are illustrated by a recent incident: "During SUMMEREX-85 Phase II, as the Kiev and its task group sailed from the Baltic Sea to the Northern Fleet, one of the Sovremenny class destroyers took 14 hours to refuel

¹⁸⁴. Daniel, Donald C. and Tarleton, Gael Donelan. "The Soviet Navy in 1985." Proceedings, Vol 112, No. 5, May 1986, p. 98. Various sources give different estimates of the number of Backfires, ranging from 20 to 80.

astern of the Soviet merchant tanker Aluksne!"¹⁶⁵ It typically takes U.S. destroyers an hour or less to accomplish the task.

This weakness severely limits the Soviet Pacific Fleet's surface combatants. The problems of slipping out through the straits, keeping supplied, and the danger from air attack all support the conclusion that Soviet surface units will not have a sea lane interdiction role. Although they might sortie to aid air and sub-surface units in combined attacks on U.S. carrier battlegroups, they will probably be held back to defend the home waters of the Soviet Union and provide "safe" operating areas for their own ballistic missile submarines.

Finally, the Soviet Pacific Fleet's ability to successfully project power against a first or second rate power beyond the range of land-based Soviet airpower is hampered by a lack of fixed wing aircraft carriers, and insufficient numbers of amphibious assault ships, and supply ships. Soviet Pacific naval assets are summarized in Table IV.

In addition to having a powerful pacific fleet, the Soviets appreciate the advantages of mine warfare. During World War II, 52 percent of Soviet destroyer losses were due to mines.¹⁶⁶ The Soviets remembered the lesson. There are over 400,000 mines in the Soviet and Warsaw Pact countries' combined inventories and the Soviets have an extensive capability to lay them.¹⁶⁷ In addition, "Moscow has an estimated 250-300

¹⁶⁵. Van Tol, R. "Soviet Naval Exercises 1983-85." Naval Forces, Vol. VII, No. VI, 1986, p. 34.

¹⁶⁶. Thomas, Gerry S., "The Pacific Fleet," in The Soviet Navy, eds. Bruce W. Watson and Susan M. Watson, Westview Press, 1986, p. 229.

¹⁶⁷. Resing, David C., CDR, USN, "Mine Countermeasures in Coastal Harbors," Naval War College Review, Vol. 40, No. 2, Spring 1987, p. 53.

TABLE IV: SOVIET PACIFIC FLEET

STRATEGIC FORCES Pacific Fleet: 32 SSBMs*

Naval bases: Vladivostok, Petropavlovsk

FLEET

Submarines:	77	SSGN	25	SSN/SS	52
Principal Surface Combatants:	82				
ASW Carriers	2	Amphibious	59		
Cruisers	15	Patrol	136		
Destroyers	14	Mine	96		
Frigates	21	Auxiliaries	128		
Corvettes	30				

Naval Infantry: 4 regts.

NAVAL AIR (Pacific Fleet Air Force) HQ Sovetskaya Gavan

Bombers: 160:	Anti-submarine Warfare: 175
Backfire 20	Fixed wing: 70
(Bear, May, Mail)	
Badger C/G 140	Helicopters: 105:
Fighters/Attack: (afloat)	Afloat: Hormone A 2 bns.
bns. Forger A/B 30	Ashore: Helix 1
bns.	Haze 2

Recon/EW/ECM: some 35 aircraft	Utility: 65
aircraft	

*Two operational Delta IV's are in the Northern Fleet.

Source: The Military Balance 1986-87, International Institute for Strategic Studies, 1986. Table drawn from information pp. 31-46.

minesweepers and is the world's leader in mine warfare."¹⁶⁸ The Soviets also have an offensive doctrine that calls for minelaying in key sea lanes. Soviet literature reveals an increasing interest in mine warfare. It claims that "post-World War II experiences have validated the increasing importance of the mine as a weapon."¹⁶⁹ And that mines are particularly effective when used offensively on SLOCs,

¹⁶⁸ Hanson, Christopher, "U.S. Fleet's Gulf Woes Seen Reflecting Bigger Navy Defects," The Reuter Library Report, 23 August 1987. Compared to 251 minesweepers according to Jane's Fighting Ships, 1986-87.

¹⁶⁹ Bray, Jeffrey K., Gunner's Mate (Guns) First Class, USN, "Mine Awareness," U.S. Naval Institute Proceedings, Vol. 113, No. 4, April 1987, p. 42.

in chokepoints, and against ports. Considering Japan's experience in World War II, this should be particularly ominous.

For these missions Soviets consider the submarine to be the ideal platform for mining.¹⁷⁰ It is covert, thus can lay mines in areas where aircraft and surface ships might be opposed, and can reconnoiter the undersea terrain before laying the mines.

Unfortunately, submarines are vulnerable in shallow water where minelaying is likely to be carried out, and are subject to detection in the process of actually laying the mines. Another disadvantage of submarines is their limited capacity. On average they can carry from 12 to 18 mines.¹⁷¹ In spite of this, the Soviets have assigned a large minelaying role for their extensive fleet of diesel submarines, as well as some nuclear boats.

The other two minelaying platforms each have advantages and disadvantages. Surface ships can deliver larger quantities of mines and accurately plot their location. Even merchants can be used for minelaying without much modification. However during minelaying, ships are vulnerable to attack. Ships are best suited for laying defensive mine fields in uncontested waters, such as the Sea of Okhotsk. Aircraft can deliver mines quickly but can not accurately plot the mines' position, making them the best platform for "rapid response" or reseeded. Aircraft can quickly block a chokepoint or harbor if there is not heavy opposition. Another feature of aerial minelaying, which may or may not be an advantage depending on the circumstances, is that it tends to be the most visible.

¹⁷⁰. Bray, p. 43.

¹⁷¹. Navy International, "Mines and Mining," p. 111.

The impact of offensive mining can be devastating. It is a cheap way to sink ships and ties up many other ships while sweeping is underway. These are the features which the Soviets find attractive, because mining provides the "maximum disruption with the minimum of effort", especially when combined with small numbers of submarines, ships or aircraft in widely dispersed attacks.¹⁷² A few mines placed in a harbor or on a shipping lane can divert or halt a lot of merchant shipping. An incident from World War II illustrates this perfectly. A total of six mines were dropped in Haiphong harbor in October 1943. Three of them exploded sinking three ships. Then a convoy of ten Japanese ships refused to enter the harbor until it was swept. No minesweepers were available so the harbor was closed for the remainder of the war.¹⁷³

Mine warfare was not observed in the 1983-85 Soviet exercises, probably because dropping practice mines in international shipping lanes is a highly provocative act. But it is likely to be a Soviet strategy because offensive minelaying, conducted by submarines and aircraft (and possibly simple mines in the opening stages of the war, by merchants, fishing vessels, and auxiliaries), is a relatively simple matter which does not require much precision. Mines would be particularly effective in the straits leading to the Sea of Japan, the Straits of Malacca, in closing Japanese and Korean ports, and in closing U.S. bases at Yokosuka and Subic Bay.

Defensive minelaying, laying mines to protect ones own harbors and coastlines, also receives a high priority with the Soviets. The same "chokepoints" that

¹⁷². Van Tol, p. 29.

¹⁷³. Greer, William L., and Bartholomew, James, CDR, USN, "The Psychology of Mine Warfare," USNI Proceedings, Vol. 112, NO. 2, February 1986, p. 58.

the U.S. Navy hopes to use to keep the Soviet Navy in its home waters, can be used to keep the U.S. Navy out. For example, the Soviets could lay defensive minefields on the inside of the three straits leading into the Sea of Japan to keep out American submarines. With the world's largest stockpile of naval mines, "including deep-water rising mines and underwater electric potential mines for use against submarines under ice," and the variety and number of delivery platforms to match, the Soviets may be able to close the Bering Strait.¹⁷⁴ This would free other naval assets, submarines for example, for offensive operations against the enemy.

The Soviet Union has two allies in the Pacific, North Korea and Vietnam, who could provide some assistance in war. North Korea does not have much to offer the Soviets militarily for sea lane interdiction. The Navy has 520 ships, including 20 submarines, 2 frigates, and 32 high-speed missile boats. The surface force is suited for coastal defense. The North Korean submarine force includes four of the Soviet Whiskey class, four Romeo class submarines transferred from China, and 12 locally built Romeo class submarines. The North Koreans are believed to have taken advantage of the fact that the shallow waters surrounding Korea are ideal for minelaying, and have designed or converted their submarines accordingly. In addition, ocean currents in the Sea of Japan would carry floating mines launched from North Korea down the peninsula in fifteen days or less, threatening Japanese and South Korean shipping lanes.¹⁷⁵

¹⁷⁴. Peterson, Charles C. "Strategic Lessons of the Recent Soviet Naval Exercises." National Defense, Vol. 70, No. 415, February 1986, p. 34.

¹⁷⁵. Park, J. K., "North and South Korea: A Comparative Naval Study," Naval Forces, No. 11, December 1985, p. 35.

The North Koreans could aid the Soviets by allowing bombers to cross their airspace, shortening the flight to attack Japan's southern sea lanes. Allowing Soviet vessels to use North Korean ports would alleviate logistics problems, especially if the North Koreans permitted supplies to be brought in by rail from Vladivostok. This would be a great aid to the Soviet Pacific fleet because North Korean ports, unlike Soviet ports, are virtually free of ice year around. Fortunately the North Koreans are very jealous of their independence and likely to resist a permanent Soviet presence. Because, if the North Koreans were to give the Soviets basing rights on the east coast, the Soviets would be able to maintain a permanent presence in the Yellow Sea and would have unrestricted access to the Pacific.

Recent relations between the two countries have been improving. Military cooperation between North Korea and the Soviet Union has been closer since President Kim's May 1984 visit to Moscow. The Soviet Union has given North Korea Mig-23 fighters and SA-3 surface-to-air missiles. And in July 1986, three ships of the Soviet Pacific Fleet, including the aircraft carrier Minsk, visited a North Korean port. The North Koreans and the Soviets also held a combined naval exercises in the Sea of Japan in October 1986.

Vietnam is another Soviet ally valuable for its strategic ports. Vietnam's navy is a collection of former U.S. and Soviet vessels, including four frigates, two corvettes, some small missile boats, and no submarines. Without the ability to operate far offshore, the Vietnamese Navy is of little account. But the 1978 Soviet-Vietnamese Treaty of Friendship and Cooperation gave the Soviets access to naval facilities at Cam Ranh Bay and an air base at Da Nang, enabling

them to maintain a permanent presence in the South China Sea. The Soviet air base at Da Nang, an electronic facility at Cam Ranh Bay, and the expansion of ports at Kompong Som and At Ream in Kampuchea on the Gulf of Thailand, put the Soviets in excellent position to interdict Japan's southern sea lanes of communication especially the important shipping lanes through the Strait of Malacca.¹⁷⁶ These bases threaten U.S. control of the area, and are undoubtedly high priority targets for the American Pacific forces in the event of war.

The situation for Japan is not as bleak as it may appear. In the Pacific the Soviet face the armed forces of China, Taiwan, Japan, South Korea, and the United States as potential opponents. In a war this would be a serious situation. Soviet bases in East Asia are isolated. They have the longest, most exposed and vulnerable sea line of communication in the world. It stretches 12,000 nautical miles from Soviet ports on the Black Sea through six seas, two oceans, and six canals and straits to the port of Vladivostok. (The sea routes through the Arctic are only open part of the year.) To illustrate the importance of this SLOC, the USSR is the largest single user of the Suez Canal. Four times as much Soviet cargo is transferred annually by sea as on the vulnerable Trans-Siberian Railway (and soon the Baikal-Amur Mainline), which has to support all of the Soviet Far East. In addition, the major base at Petropavlovsk, which has no rail or road communication with the mainland and must be completely supplied by sea, is a 1500 mile sea voyage beyond the rail terminals at Vladivostok.¹⁷⁷

¹⁷⁶. Defense of Japan, 1984, p. 27.

¹⁷⁷. Defense Nuclear Agency Report 5298F, Targeting Soviet Naval Projection Forces, by D. A. Paolucci and others, 25 April 1980, p. 95.

The Soviet Union has tried to protect its vulnerable southern SLOC by forward deploying naval squadrons to the South China Sea and the Indian Ocean. But the Soviet Pacific Fleet does not have the assets to fight a major war in East Asia and the Indian Ocean at the same time.¹⁷⁸ The Soviets must assume that the United States will cut this SLOC. This would create a colossal logistics problem for the Soviets, and probably severely limit naval operations in the Pacific.

Fortunately for the Japanese sea lanes, the Soviet Union is unlikely to commit many of its units to an interdiction campaign. Soviet military doctrine stresses the importance of combined operations and the Navy's role in supporting land campaigns. The role of sea lane interdiction in war is acknowledged, but Soviet doctrine states that though a war can be lost on the sea, it can only be won on the ground. For this reason the Soviets Naval assets are likely to be assigned defense of the home waters, or the "bastions", as a primary mission, with SLOC interdiction as a secondary mission.¹⁷⁹

Exercises seem to confirm this. In the past, such as Okean-70 and Okean-75, exercises were directed from the Main Naval Staff in Moscow. Air attacks in the Atlantic and Pacific were coordinated and nearly simultaneous. This reflected the prevailing attitude of the vital importance of the 'Battle of the First Salvo' which stipulated that the most massive strike possible was to be delivered at the start of the war. There was no need for flagships or local control since

¹⁷⁸. Westwood, James T. "What Will Its Meticulous Planning Lead to Tomorrow?" The Almanac of Seapower 1986, Navy League of the U.S., 1986, p. 33.

¹⁷⁹. Fisher, Richard, "Soviet SLOC Interdiction," The Soviet Navy, eds. Bruce W. Watson and Susan M. Watson, Westview Press, 1986, p. 162.

it was assumed that the war would quickly escalate to the nuclear level. This view has given way to the belief that war with the West would probably start with an extended conventional phase, and might terminate below the nuclear level, stimulating interest in sea lane interdiction.¹⁸⁰ This change has resulted in numerous command reorganizations, changes in tactics, and an emphasis in ship design on sustained operations rather than maximizing the first strike capability.¹⁸¹

In contrast to the world-wide co-ordination of Okean-75, FALLEX-83 was much more diffuse and was not run according to a single master plan. In Okean-75, the shooting section of the exercise lasted three days, with nuclear escalation on the third day. In SUMMEREX-85 Phase III, the shooting period lasted seven days with no nuclear escalation. In Okean-75, naval forces deployed in positions to deliver a pre-emptive strike. In recent exercises tactical problems have been emphasized, such as anti-surface ship (especially anti-carrier) tactics by aircraft and submarines, anti-air and anti-submarine defence by surface ships, and long range sorties aimed at isolating South Korea and Japan from reinforcement.

The recent exercises seem to indicate that, for the most part, Soviet strategy continues to be one of sea denial, that is, being able to deny use of the sea to an opponent. Sea control, on the other hand, implies the ability to control an area to accomplish a mission, such as convoying, amphibious assaults, and air or missile attacks against the shore.

Large ocean exercises have been the exception rather than the rule in the Pacific. Nonetheless there

¹⁸⁰. Fisher, p. 162.

¹⁸¹. The following information on Soviet exercises is from R. Van Tol, pp. 20-24, opinion previous cited, unless otherwise noted.

were two in 1985, and these provide clues to the Soviet strategy in the Pacific. On examining these exercises, we need to keep in mind that "in the Soviet Navy it is the air, and especially the submarine forces which are the primary combat arms, the surface forces being supportive to their missions."¹⁸²

In April, during SUMMEREX-85 Phase I, a battle group comprised of the Kiev class carrier Novorossiysk and eight other ships made an extraordinarily long transit into the Pacific--steaming out 1500 miles east of Tokyo--before turning around and returning toward the Kurile Islands and Sea of Okhotsk. The force was kept under surveillance by Soviet aircraft and attacked, probably by coordinated air and submarine forces, 600 miles east of Japan. 20 Backfire bombers took part in the attack. The attacks clearly showed the SNA's determination to mass its aircraft for continuous attacks ("wave" attack doctrine) against a hostile threat.¹⁸³ Analysts concluded that the Novorossiysk group was simulating an American carrier battle group intent on attacking Soviet ballistic submarine support facilities.¹⁸⁴

The Novorossiysk's tactics illustrated the difficulties the Soviets have with replenishment ships. The group had to take two replenishment ships with it because Japan sits astride the line of supply back to Vladivostok. The Altay class tanker's maximum speed was 14 knots, curtailing the group's operations. To ease the situation, the tanker was sent alone on a short-cut through the Tsugaru Straits between Hokkaido and Honshu, while the group went south around Okinawa

¹⁸². Van Tol, p. 22.

¹⁸³. Jacobs, "Soviet Pacific-based Strike Forces," p. 21.

¹⁸⁴. Daniel and Tarleton, p. 105.

before meeting up with the tanker north of Iwo Jima. This maneuver is not likely to work in wartime. Even so, the group was still constrained to 19 knots, the maximum speed of the Boris Chilikin, the other replenishment ship. Only when the group returned to port, and the auxiliaries were left behind, was the group freed from this speed constraint.

Vessels deployed to the Indian Ocean are probably expected to be destroyed before they need logistics support. But the Soviet Pacific Fleet will be constrained to operate only in the Sea of Japan and the Sea of Okhotsk until it gets better logistic support. The deficiency of the auxiliaries is offset somewhat by the Soviet Merchant Marine, most of which are equipped for astern refueling of naval vessels.

The Pacific was the scene of another large naval exercise in September 1986. This time the Novorossiysk and 20 other ships and submarines, as well as Backfire bombers, MiG-23 Flogger fighters, and ASW patrol aircraft, defended the Kurile Islands area and the Sea of Okhotsk. This tactic fits the Soviet "bastion" concept of deploying their nuclear ballistic submarines (SSBNs) in constricted waters near the USSR, where they can be defended by a combined-arms, multiservice effort. Most Western analysts agree that the execution, or the deterrence, of nuclear war has priority over the Soviet fleet's other missions.¹⁸⁵

In the Pacific two bastions may be established. The narrow entrances to the Sea of Japan at the Tsushima, Tsugaru, and La Perouse Straits may be sealed by Soviet forward defensive barriers, providing a sanctuary for Soviet naval operations. The Sea of Okhotsk is protected by the Kurile island chain, and

¹⁸⁵. Tritten, James J. "Defensive Strategy and Offensive Bastion." Sea Power, Vol. 29, No. 12, November, 1986, p. 66.

could also be sealed, but it is partially iced over much of the year. On the other hand, Petropavlovsk, located on the Kamchatka Peninsula, is directly on the Pacific Ocean, free from natural barriers, making it an ideal base for submarines.

The Soviet Navy's concern for seizing control of the Soya strait in order to ensure access to the Pacific from the Sea of Japan, may have been the reason for landing exercises on the southern coast of Sakhalin on 28 August 1987. While Soviet aircraft conducted large-scale bombing missions, 25 naval vessels assembled in the Sea of Okhotsk. The landing was conducted and then 14 ships, including the aircraft carrier Novorossiysk and the amphibious assault landing ship Ivan Rogov, departed through the Soya Strait late on the 28th and early on the 29th of August.¹⁸⁶ Analysts believe the exercise may have simulated an invasion of the northern tip of Hokkaido to capture both sides of the strait for the Soviets. The exercise demonstrated the value of maritime air patrol because the Soviet ships were initially spotted and tracked by MSDF P-3C antisubmarine patrol planes.¹⁸⁷

In summary, the predominance of low grade surface combatants in the Soviet Pacific Fleet reflects its missions: The surface force exists primarily to protect the strategic SSBNs and as a coastal defense to protect the Soviet homeland against attack by enemy naval vessels. The missions of SLOC interdiction, sea control and sea denial are secondary missions for it. The surface fleet is not equipped to fight in waters far from the Soviet Union. "The major weakness appears in the forces that are performing extended, independent

¹⁸⁶. The British Broadcasting Cooperation, "Japan Reports Soviet Landing Exercises on Sakhalin," 31 August 1987.

¹⁸⁷. Kyodo News Service, "MSDF Maintains Close Watch On Soviet Naval Movements," 28 August 1987.

surface combatant operations outside the umbrella of land-based naval aviation."¹⁸⁸ Power projection is a secondary mission of the Soviet Navy and the ability to project power in a manner comparable to the United States Navy remains in the distant future.

But the considerable sea denial capability inherent in the Pacific Soviet Naval Aviation force, and the Pacific submarine force reflect a completely different strategy. Against Japan, a relatively small Soviet effort in minelaying, and anti-shipping submarine and air patrols, would reap great benefits in sea lane disruption. Such a "low cost--large benefits" strategy is widely promoted in Soviet military literature and in the event of war is likely to be employed against Japan.

A consideration of the possible scenarios reveals a sea lane interdiction campaign against Japan to be the most likely threat. The Soviet Union has no motivation to launch a massive invasion of Japan, which would require enormous resources and cost many casualties. However, a sea lane interdiction campaign against Japan would cost very little and would have a greater effect than invasion. Japan is not self-sufficient in food, energy, or resources and would quickly feel the effects of a blockade.

If the Soviet Union were to launch a massive sea interdiction campaign against Japan, the United States would be forced to intervene to protect its most important Pacific ally, possibly beginning a global war. The Soviet leaders know this and would probably avoid it.

The Soviet Union could use a limited sea lane interdiction campaign against Japan, to gain a

¹⁸⁸. Watson, Bruce W. and Susan M. Watson. The Soviet Navy Strengths and Liabilities, Boulder: Westview Press, 1986, p. 238.

political concession, such as the termination of U.S. basing rights in Japan, or an agreement to guarantee free passage for warships through the Soya strait, or perhaps to force Japan to agree to demilitarize Hokkaido. Without U.S. aid, Japan would not be able to resist. But the United States would probably vigorously encourage the Japanese to resist and would promise military assistance.

But the most likely scenario would be that the Soviet Union is already fighting with the United States and seeks to pressure Japan to stay out of the war, or to deny the American forces the use of Japanese bases, or to force Japan to grant concessions over Hokkaido and the Soya strait.

In a war with the United States, the Soviet Pacific Fleet's two primary missions are to protect the SSBN's in the bastions and to destroy the U.S. aircraft carriers. The majority of Soviet assets would be assigned these two missions. However, a number of aircraft and submarines would be assigned attack American shipping, and if Japan was in the war, to interdict Japanese sea lanes, put pressure on Japan, and to divert allied assets into sea lane defense operations. In this situation, Japan would desperately need to be able to defend her sea lanes.

C. CHALLENGES AND IMPERATIVES

Japan's challenge is to respond to the threat to its sea lanes. The danger comes from the Soviet Pacific Fleet's long-range aircraft and submarines, either in the form of direct attacks against merchant shipping or by a mining campaign. To defend against direct air attack requires comprehensive air defense over Japan's southern sea lanes. To defeat a submarine interdiction campaign requires convoying, strait

defense and barrier anti-submarine warfare. Mining must be combatted by opposing the minelaying operations and by sweeping.

The Atlantic Council study, Securing the Seas, estimates that 10 to 30 submarines and 30 to 60 long-range aircraft might be assigned the mission of sea lane interdiction in the Pacific.¹⁸⁹ These are appropriate estimates, so for the purposes of this research it is assumed that 20 submarines and 45 aircraft are assigned to attack Japan's sea lanes. Convoying will be used to defeat the submarine and air threat.

In 1985 Japan imported 593 million tons of resources, of which 29 percent was oil, 21 percent was iron ore, and 16 percent was coal. Assuming that Japan stockpiles 60 days supply of strategic resources, which is the official government target, in a crisis the government would institute rationing which would make those supplies last for 90 days at wartime consumption, as long as some imports were still arriving. In 90 days, according to the Securing the Seas estimates, the loss of merchant shipping should begin to slow due to submarine attrition from anti-submarine warfare. Attrition of Soviet attack aircraft should begin to reduce merchant shipping losses from air attack also. Today's ships are larger and faster than those of World War II. For this study 20,000 tons and 15 knots are considered the average. One convoy of 60 ships arriving every other day would deliver cargo at the annual rate of 219 million tons or about 36.5 percent of the peacetime deliveries. Vice Admiral Hozumi, and other experts, consider 200 million tons annually to be

¹⁸⁹. Nitze, Securing the Seas, p. 114.

the least amount of imports that Japan requires.¹⁹⁰ This is considered sufficient, with the 60 day stockpiles, to keep the economy operating for a period of perhaps six months allowing for some heavy losses early in the conflict.¹⁹¹

All shipping going to Japan would be convoyed by MSDF escorts. Shipping which would normally go through the Malacca Strait will be rerouted south through the Torres strait, or around Australia to keep shipping as far from the threat as possible. This route adds a lot of time to transits, but complicates the sea lane interdiction campaign and would save some merchant vessels. It would be better to get the cargoes later, rather than not at all. Ships coming from Indonesia and the Philippines would be routed south of the Philippines (beyond the range of Backfire bombers) and over to Guam also. The convoys would form up around Guam where they would be protected by U.S. fighters. Guam is approximately 2,000 nm from Vladivostok, (and further from Sovetskaya Gavan) which is almost the limit of the combat range of the Backfire bomber. Guam is approximately 1,500 nm from Yokohama, which is further than the Japanese government has agreed to protect its sea lanes, but in a crisis the Japanese might be willing to go further, or the U.S. could escort them the first part of the way, or the convoy could simply start without escorts and pick them up at 1,000 nm. This studies assumes that due to scarcity of

¹⁹⁰. O'Connor, Michael, "Western Pacific Sealanes Under Growing Threat," Asian Defense Journal, January 1987, p. 59.

¹⁹¹. Vice Admiral Hozumi of the JMSDF stated at the fourth conference on the Security of the Sea Lanes held at Taipei 13-15 July 1986, that he considered at least 200 million tons annually necessary to maintain the lowest possible standard of living and self defence capability, as reported in Michael O'Connor's "Western Pacific Sealanes Under Growing Threat," Asian Defence Journal, January 1987, p. 59.

assets and the low threat at the extreme range of attacking aircraft that the convoys begin the run unescorted and are picked up 1000 nm from Japan by MSDF escorts.

The run from Guam to Yokohama would take just over 5 days if the convoys steam at 15 knots, considering that they will only advance at 12 knots due to zig-zaging and random course changes. They will steam unescorted the first day, so the escorts will be making the trip in four days, and allowing half a day to refuel on each leg, the escorts will be able to make a round trip every ten days. The average World War II convoy had from six to eight escorts, but the number of escorts did not appear to significantly affect the loss rates of merchant ships, so these convoys will sail with only six escorts.¹⁹²

To deliver one escorted convoy every other day would require a force of 36 dedicated escorts. The plan calls for operating 6 escort groups (three going in and three coming out) of six ships. Ideally an extra 10 percent (four ships), to cover escorts sunk or forced to turn back for emergency repairs, should be allowed, but will be ignored. Allowing 30 destroyers or frigates for coastal defense of Japan (the same size force as is presently allowed) this convoying plan would require a fleet of 66 escort ships. (With the safety margin it would be 70.)¹⁹³ Each of these convoys would also be supported by one maritime patrol aircraft, P-3C, twenty-four hours a day. Each squadron has 10 aircraft. If we assume two are not mission capable, and the other four fly 12 hour missions, (two

¹⁹². Nitze, p. 346.

¹⁹³. Obviously the number of convoys, escorts, distance, and speed all affect the number of escorts required. 66 was decided on because the 6 additional destroyers required would equal a large increase in capability and does not appear to be an unreasonable goal.

hours out, eight on station, and two hours back), and have 20 hours recuperation for the crew before the next mission, then each squadron could support two convoys. If the present inventory of maritime patrol aircraft is providing efficient coverage of the waters around Japan, then this plan would require an additional 20 P-3C Orions for direct support of convoys. Another two squadrons are required to provide minimum coverage for barrier operations along the island chains, bringing the total recommended increase to 40 P-3C's.

In addition, mine barriers would have to be laid in all the straits leading into the Sea of Japan, and in all the gaps in the island chains referred to above in Sekino's plan. The number of mines depends on the type of mine available and the depth of water, type of bottom and intended target, which this study will not specifically address.

Against the threat of long-range Soviet aircraft, land-based fighters stationed on Iwo Jima, Okinawa, and Japan, supported by early warning radar sites, AWACS aircraft, and tanker aircraft make the most sense for air defense. They are more cost effective, and much less controversial in Japan, than building expensive aircraft carriers. Since the MSDF intends to operate primarily within land-based fighter range of their own territory anyway, this would not be a significant degradation of its capabilities. Concerning the MSDF's proposed area anti-air (AAW) surface ships, even the U.S. Aegis equipped Ticonderoga class would probably not be able to provide enough air defense for a 60 ship convoy that would cover approximately 60 square miles of ocean (if ships were spaced a mile apart, which might be too close) and maybe more. This is especially true if the bombers all attack at the same time.

The attacking aircraft have four alternative routes to get to the southern sea lanes. They could fly west over Sakhalin, turn south over the Kuriles, and fly down the east side of Japan. In this case, they would most probably be detected by radar sites on Hokkaido, and could be intercepted by fighters based on Honshu. Or they could fly over Japan itself, in which case they would be detected and attacked by interceptors based in Japan. They could fly over the Sea of Japan, down the Tsushima strait and out into the Pacific. These fighters should be detected by radar sites in Japan and could be intercepted by fighters from Japan or from Okinawa. The fourth route is over North Korea, if they received permission, and is almost the same route as the one over the Sea of Japan. The route that the attackers would be the most likely to escape detection on is the first one over the Pacific east of Japan. But it is also the longest and could be defended by an interceptor squadron on Iwo Jima.

The key to defeating the air threat to the sea lanes, is in early detection. The JDA is investigating a recent proposal to build two over-the-horizon-back scatter (OTH-B) radars: one on Iwo Jima, and the other on Kikai Jima, an Amami island just south of Kyushu. These radars would provide early warning out to about 4000 km depending on atmospheric conditions, and cover the airfields at Vladivostok and Sovetskaya Gavan. JASDF's F-15J Eagle fighters backed by airborne tankers would provide the outer air defense of Japan and the sea lanes. The second layer of early warning would be provided by eight Grumman E-2C Hawkeye AWACS, which are now primarily based at Misawa Air Base. The ASDF has five more E-2C's included in the current mid-term defense buildup program. But the E-2C is somewhat limited in range and can not adequately cover the sea

lanes out to 1000 miles. The ASDF also plans to request tankers in the next defense budget, beginning in fiscal year 1988. The final layer of air defense is projected to be an Aegis-type destroyer. The JMSDF plans to request the first in the fiscal year 1988, and the second in 1990. Ultimately, it hopes to purchase two more, which will give it one for each escort flotilla.¹⁹⁴ Unfortunately, in the meantime, with no tanker support for the interceptors, there is little air defense for the sea lanes.

To correct this, airborne tankers are needed. Then the land-based F-15's could provide protection. Airborne tankers and additional F-15 squadrons seem to be a better use of the money. For this convoy defense plan, three squadrons of F-15 fighters operating in support of the sea lanes, with one squadron supported by tanker aircraft and an AWACS squadron from each base, one on Iwo Jima, one on Okinawa and one on Kyushu, should provide the minimum attrition rate to destroy the force of attacking bombers before they can destroy enough merchant ships.

The 45 bombers would probably attack the convoy at the midway point of its transit, since it would be furthest from air cover. If they flew one sortie a day, they could attack each convoy once, hitting perhaps 20 ships. Not all of these ships would be lost, for as can be seen from the Persian Gulf War, large merchants are difficult to sink with air launched missiles. However, the number of hits and losses are not as important as the attrition rate on the attacking aircraft. As the force is diminished, unless the losses are replaced by diverting aircraft from other missions or by new production, it is obvious that the

¹⁹⁴. Ebata, Kensuke, "Ocean Air Defense Japanese Style," USNI Proceedings, Vol. 113, No. 3, March 1987, p. 98-101.

merchant vessels lost to the air attack will decrease daily. To illustrate this, imagine that 45 attacking aircraft were able to destroy 20 ships, but lost one aircraft to air defense. At the end of 45 days, all the attacking aircraft would be destroyed and would have destroyed 450 merchant ships. If no new aircraft were assigned to the mission, the rest of the merchant vessels would arrive safely.

Another aspect to consider in an air interdiction campaign is that port facilities might be more important than ships. The newer larger merchant ship need larger berths to unload their cargoes and most Japanese ports, such as Tokyo Bay, Osaka, and Kobe are vulnerable to air attack. No missile sites defend them, so they are dependent on the JASDF fighters for protection. By destroying the ports, the attacker could block the receipt of needed imports.¹⁹⁵

The submarine attack on the sea lanes would be defeated by the war of attrition in the same way as the air defense destroyed the attacking bombers. During World War II, the average submarine sank 4.7 merchants before being sunk.¹⁹⁶ If we double that ratio to allow for the advances in a modern submarines equipment, (probably an exaggeration) and allow the 20 opposing submarines to sink 9 merchants apiece before being sunk, they would sink a total of 180 ships. Securing the Seas, found that the submarine threat was usually defeated in 90 days, depending on the number and effectiveness of the ASW forces opposing them. Adding the 180 merchants that the submarines destroy, to the 450 merchants the aircraft destroy, gives the estimate that, in this scenario, 630 merchants would be lost in

¹⁹⁵. O'Connell, John F., "The Role of the Self-Defense Forces in Japan's Sea Lane Defense," Journal of Northeast Asian Studies, Vol. 3, No. 3, Fall 1984, p. 60.

¹⁹⁶. Nitze, p. 358.

the first 90 days of the war, with the majority being lost in the first month, and then the losses would decline. Thus of the 2700 merchants convoyed in the first 90 days, 630, or 23 percent, would be lost, with the about half of these losses occurring in the first month. After that point, most of the merchants would arrive safely.

The submarines would be destroyed as they passed through the three straits, by barrier operations, and mostly by the convoy escorts, including the supporting P-3C maritime patrol aircraft. Mining the straits, defending them with the JMSDF submarines, and patrolling them with the escorts assigned to the district forces has already been mentioned. In addition, the two island chains on each side of the sea lane should be used to form an ASW barrier by constructing sonar listening stations on the islands. ASW helicopters could also be operated off these islands. And at least one squadron of P-3C maritime patrol aircraft should patrol each barrier. This barrier should be strengthened by mining the gaps between the islands, preferable with the U.S. captor mine. No forces would be deployed in area ASW. ASW forces would encounter more submarines as convoy escorts.

Strait defense would probably be the second largest method of destroying submarines. The principle means of defending the straits should be mining. For the reasons already discussed, mining is the most effective of naval warfare. For this a stockpile of various types of mines needs to be developed. But the principle weapon would be the Captor mine.¹⁹⁷ The minefields in the straits should be backed up with

¹⁹⁷. Securing the Seas estimated the cost of a Captor mine barrier with a kill probability of 0.1 would cost \$60 million per 100 miles of barrier, p. 364.

JMSDF submarine patrols. With their reputation for excellent ASW they should produce a relatively high attrition rate. One squadron of from two to three submarines should be assigned to the Tsugaru strait, and two squadrons each to the Soya and Tsushima straits. The remaining submarines could be assigned against Petropavlovsk, or to barrier operations, or to trouble spots on the sea lanes. The surface escorts not assigned to convoy duty are divided into ten regional squadrons. They should patrol each of the straits, depending on whether they can be protected from the air threat. Other squadrons should patrol the coastal approaches to keep watch for submarines laying mines and to lessen the chance of merchants sinking in the port approaches. They should not be deployed in the Sea of Japan, as there is little invasion threat and they are too vulnerable to air attack. The surface-to-surface missiles to be placed on Hokkaido are the most effective defense against invasion, if defensive minefields are laid and the missile sites are defended against Soviet air attack.

The third option for employing the attackers is in a minelaying campaign. Soviet submarines can carry an average mine load of 15 mines. If all 20 submarines were dedicated to minelaying operations, and were able to make an average of ten patrols (which is an attrition rate of 0.1) they would be able to deliver 3000 mines. Using the highest rate of effectiveness from World War II mining, if one out five of those mines were effective then 600 ships would be damaged. At the average World War II rate of effectiveness (1 out of 40) only 75 ships would be damaged. Since the submarine could lay its mines with more precision in the shipping lanes, it is reasonable to assume that they would be more effective than the war averages. In

addition, the mines that did not sink ships would still have to be swept, tying up allied resources. Employing submarines in a minelaying role rather than an anti-shipping role would be more effective.

If the 45 aircraft were all dedicated to minelaying, they could deliver an appreciably greater number of mines than the submarines, especially because they could fly more sorties since they would not have as far to go. Backfires, Bear C/G's, and Badger A's, all in the Pacific inventory, can carry mines although their exact capacity is unknown.¹⁹⁸ (For comparison purposes, A-6 can carry 5 2,000-lbs. mines, P-3's up to 11,000 lbs. of mines and B-52's can carry 44,000 lbs. of mines.)¹⁹⁹ The mines would be laid in the approaches to Japan. The number of mines delivered would be a function of the type aircraft and number of sorties. But since the sea lane from Guam to Japan is through water that is too deep to mine, aerial minelaying would have to be done in waters close to Japan, and thus within range of Japanese F-15 interceptors.

Even so, recent experiences in mine clearing operations (Haiphong, the Red Sea, etc.) do not encourage expectations that the 33 minesweepers of the MSDF would be able to do more than keep a few essential ports open. The MSDF minesweeping force is one of the largest and best in the world, but a large-scale mining campaign is beyond its abilities to overcome.²⁰⁰

Long-range bombers from the bases in Vietnam could mine the Straits of Malacca, however. This would cause a faster rate of attrition. But even so, a mining

¹⁹⁸. Jacobs, G., "Soviet Naval Aviation in the Pacific," Navy International, Vol. 92, No. 6, June 1987, p. 347.

¹⁹⁹. Securing the Seas, p. 285.

²⁰⁰. O'Connell, p. 60.

campaign would effectively destroy many merchant ships, prevent others from reaching Japan, and engage a lot of allied resources in opposing minelaying operations.

In summary, Soviet long-range bombers pose the greatest threat to Japan's sea lanes, partly because Japan has an inadequate defense against them. Submarines also threaten the sea lanes, but only a few would be used for SLOC interdiction, and the MSDF has considerable ASW forces, this threat could be successfully defeated with the addition of only a few more ASW forces. A full-scale mining campaign would also threaten to close Japan's sea lanes, despite her capable minesweeping force.

This analysis has argued that Japan already has most of the forces required to fulfill a mission of defending its sea lanes out to 1000 nautical miles. Other analysts have proposed other force levels. Sekino's plan and Shilling's plan have already been discussed. Both of these plans stress protection against the submarine threat and do not consider the air threat.²⁰¹ The convoy plan presented in this paper recommends increasing the SDF's forces by 40 land-based maritime patrol aircraft, at least 6 and preferably 10 ASW destroyers, and two squadrons of interceptor aircraft (40 planes), supported by two squadrons of airborne tankers (8 or 10 aircraft). Another estimate of the force levels needed by Japan for sea lane defense out to 1000 nautical miles was made by Senator Carl Levin and submitted to the U.S. Congress in 1983. Senator Levin's estimate was reviewed by Norman Polmar, a naval expert, who agreed with the recommendations except that Polmar felt Senator Levin inflated the need

²⁰¹. Sekino's plan was not a convoy plan, but a sea lane protection scheme. In a wargame about 1970, Sekino estimated that 54 destroyers would be required to convoy 60 ships every three days from Guam to Japan. Auer, p. 165.

for F-15's, AWACS, and SAM units slightly, and ignored a critical need for sea-based aviation.²⁰² Table V compares these estimates to the NDPO which is still Japan's intended force structure.

TABLE V: FORCE ESTIMATES FOR JAPAN'S SEA LANE DEFENSE

	NDPO	Sekino	Schilling	Levin	Convoy
ASW ships	60	128	45	80	66
Carriers	0	3	0	0	0
Subs	16	15		27	15
Minesweep	2 flot	64		0	2 flot
P-3's	220	220		350	260
Fighters	200			500	260
AWACS	8			20	16
Tankers	0			14	24

Source: Figures compiled from plans as described in the sources cited, except for the NDPO which are from Japan's Defense 1986.

The earlier plans concentrate on defending against submarines, because at the time they were devised, the Soviet air threat was not as potent. Therefore they emphasize fixed-wing maritime patrol aircraft and surface ASW forces. This is true of the NDPO also. As the guide for Japanese force levels it is obsolete. The NDPO needs to be revised in accordance with the current threat. The later plans, Levin's and this paper's convoy plan, pay much more attention to the threat from Soviet long-range bombers. Both stress using land-based fighters, supported by early warning aircraft, radar sites, and tanker aircraft to defend the sea lanes.

Control of the air and strong ASW forces also seem to be the best defense against a massive minelaying campaign since it is much easier to prevent mines from being laid than to clear. However, Japan must maintain

²⁰² Modly, Thomas B., "The Rhetoric and Realities of Japan's 1,000-Mile Sea-lane Defense Policy," Naval War College Review, Vol. 38, No. 1, January-February 1985, p. 31.

a significant minesweeping capability to prevent a limited minelaying campaign from closing its ports.

VI. CONCLUSION

The Japanese government has recognized the danger to its sea lanes and the fact that the United States can not protect those sea lanes alone. The government's efforts, a strong economy, and an awareness that the global balance of power is changing, appear to have laid the foundation for a new consensus on defense that would include a significant improvement in Japan's abilities to protect its sea lanes out to 1000 nautical miles.

In achieving that capability, the best defense is a plan that combines land-based air defense, convoy operations, and strait control and barrier operations. Japan could achieve the capability to defend its sea lanes within the next ten years with a moderate effort to improve its existing forces.

Japan's efforts to protect its sea lanes would be complementary to, and in conjunction with, U.S. efforts to maintain control of the sea in the Pacific and Indian Oceans. The United States would continue to provide power projection and offensive strike capability in the Northwest Pacific. By guaranteeing the safety of its own sea lanes out to 1000 nautical miles, Japan would contribute greatly to the U.S.-Japan alliance in a manner most compatible with its domestic political principles and practices.

In Japan's efforts to reach a new consensus and devise a new force structure for defense, it is essential to pay close attention to ocean air defense, convoying, and mining capabilities and ASW barrier operations.

The air defense of Japan's sea lanes must be improved by increasing the number of land-based

interceptor aircraft. These additional aircraft should be based on Okinawa, Iwo Jima, and southern Kyushu. Airborne tankers need to be procured to give the fighters the necessary range. Finally, the fighters must be supported by early warning radar sites and AWACS aircraft.

Past experience has shown convoying to be necessary to defeat sea lane interdiction campaigns. Technological advances have not changed this. The Japanese government must consider convoy operations an essential part of sea lane defense. Plans for convoying should be promulgated prior to the outbreak of hostilities. JMSDF commanders should be encouraged to consider the tactical problems of convoying.²⁰³ More surface escorts are needed to protect the convoys that Japan would require if its sea lanes were interdicted. Efforts to upgrade naval vessel's defenses against anti-ship missiles should continue.

Japan's mine stockpile should be increased so that sufficient mines are available to close the three straits and to construct barriers to protect its sea lanes. More delivery platforms are also required. To aid in patrolling mine barriers protecting the sea lanes additional maritime patrol aircraft are needed. These ASW aircraft should be based on Okinawa, Iwo Jima, and southern Kyushu, to give direct support to convoys and barrier operations. Finally, the islands along Japan's sea lanes should be improved with sonar stations and helicopter landing strips to enhance barrier operations.

²⁰³. Captain Stuart Landersman makes a convincing case for recruiting retired naval officers into a reserve program where they study the principles of convoying and are encouraged to consider tactical solutions to convoying before the outbreak of war in his article "I am a Convoy Commander," USNI Proceedings, Vol. 112, No. 6, June 1986.

These moderate increases in Japanese force levels would greatly enhance their sea lane defense capabilities and would be Japan's best contribution to the U.S.-Japan alliance.

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